51745-2-U

FLORIDA MORBIDITY STATISTICS 1981

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

BOB GRAHAM, Governor

STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

DAVID H. PINGREE
SECRETARY

JAMES T.HOWELL, M.D., M.P.H.
Deputy Secretary

LARRY J. OVERTON
Assistant Secretary for Program
Planning & Development

HEALTH PROGRAM OFFICE

STEPHEN H. KING, M.D.
Staff Director and State Health Officer

PREVENTIVE HEALTH SERVICES

JOHN J. WITTE, M.D., M.P.H.
Program Administrator
Preventive Health Services

JEFFREY J. SACKS, M.D., M.P.H.
Acting State Epidemiologist

FAYE E. SORHAGE, D.V.M., M.P.H.
Medical Epidemiologist

WILLIAM J. BIGLER, PH.D.
Epidemiology Program Supervisor

HENRY T. JANOWSKI, M.P.H.
Assistant State Epidemiologist

SPENCER LIEB, M.P.H.
Epidemiologist/Program Manager

RANDAL C. MUTTER, B.S.
Health Program Specialist

LORRAINE S. BAILEY, M.A.
Statistician

HEALTH PROGRAM OFFICE
PREVENTIVE HEALTH SERVICES
EPIDEMIOLOGY PROGRAM
1317 WINEWOOD BOULEVARD
TALLAHASSEE, FLORIDA 32301

TABLE OF CONTENTS

Introduction v
Acknowledgments vi
Epi-Notes and Morbidity and Mortality Weekly Report (MMWR) Articles vii
Map of Florida Indicating HRS Districts,
Subdistricts, and Full-Time County Public Health Units xv
Alphabetical List of Florida Counties with 1981
Populations and District Numbers xvi

SECTION 1 - Summary of Selected Notifiable Diseases 1
Reported Cases of Selected Notifiable Diseases by Month
of Onset, Florida, 1981 3
Reported Cases of Selected Notifiable Diseases,
Florida, 1972-1981 4
Reported Case Rates Per 100,000 Population for Selected
Notifiable Diseases, Florida, 1972-1981 5
Reported Cases of Notifiable Diseases of Infrequent Occurrence,
Florida, 1967-1981 6

SECTION 2 - Analysis of Selected Notifiable Diseases 7
Encephalitis, Post-Infectious and Other 9
Hepatitis A 11
Hepatitis B 15
Hepatitis NANB Associated with Blood/Blood Products 18
Hepatitis NANB Not Associated with Blood/Blood Products 21
Hepatitis Unspecified 23
Measles (Rubeola) 26
Meningitis, Aseptic 30
Meningitis, Meningococcal 33
Meningitis, Other Bacterial 36
Rubella (German Measles) 38
Salmonellosis 42
Shigellosis 45

SECTION 3 - Analysis of Animal Rabies & Zoonotic Diseases 49
Animal Rabies 51
Mosquito-Borne Encephalitis 60
Zoonotic Diseases 62

SECTION 4 - Summary of Venereal Diseases 65

SECTION 5 - Summary of Tuberculosis 81

HEALTH PROGRAM OFFICE

Stephen H. King, M.D.
Staff Director, Health Program Office
and State Health Officer

EPIDEMIOLOGY PROGRAM, PREVENTIVE HEALTH SERVICES
Jeffrey J. Sacks
Acting State Epidemiologist

Henry T. Janowski, M.P.H.
Assistant State Epidemiologist

Lorraine S. Bailey, M.A.
Statistician

Spencer Lieb, M.P.H.
Health Program Specialist

Linda Sue Zwirz, B.S.
Statistician

INTRODUCTION

This is the 37th edition of Florida Morbidity Statistics and continues the series begun in 1945. Data on the reported incidence of notifiable communicable diseases are presented. Some unpublished records for the years 1918 through 1944 are available upon request from the Epidemiology Program.

Sources of Data

Data in this report are based on case reports furnished to county health units by private physicians, hospitals, and others. Other sources of data include death certificates and laboratory reports which are checked routinely for previously-unreported cases of notifiable diseases.

Reports of such cases are investigated by county public health unit personnel, confirmed as a case and, in turn, reported to the Epidemiology Program.

The population figures used in calculating the case rates for certain diseases are estimated by the Bureau of Economic and Business Research, College of Business Administration, University of Florida.

Diagnosis

Individual case reports are verified as being a case of the disease reported by investigations conducted by county health unit personnel. Most cases are physician-diagnosed and have appropriate laboratory verification. Individual case investigation forms are forwarded to the Epidemiology Program for review and, in some instances, forwarded to the Centers for Disease Control.

Residence

Occurrence of cases by county is usually reported by the residence of the case. Reports originating from hospitals and other places outside the ill person's county of residence are credited to the county of usual residence.

ACKNOWLEDGMENTS

The Epidemiology Program acknowledges the important role played by Charles Hartwig, Sc.D., Director of Laboratories in the control of communicable diseases. Dr. Hartwig's responsibilities include supervision of the Central Laboratory, the Epidemiology Research Center, and the seven branch laboratories. Other HRS units which contribute substantially to this overall effort are Vital Statistics and Public Health Statistics and the Office of Management Systems Computer Services.

Special thanks go to Departmental employees in the Sexually Transmitted Disease Control Program and the Tuberculosis Control Program for their efforts in the prevention, surveillance, and control of communicable diseases, especially Jack Wroten, Chief, Sexually Transmitted Disease Program, and Clifford H. Cole, M.D., M.P.H., Director Community Tuberculosis Control Services.

The HRS Office of Public Information is thanked especially for its assistance in the preparation of graphic material in this report.

Further acknowledgment is made to HRS districts and county health units for their collective efforts in the statewide communicable disease morbidity surveillance and reporting system. The participation of physicians, hospitals, nurses, sanitarians, infection control nurses, epidemiology/communicable disease specialists, communicable disease report persons, and clerical staff is likewise greatly appreciated.

EPI-NOTES AND MORBIDITY AND MORTALITY WEEKLY REPORT (MMWR) ARTICLES

MEASLES

A total of 88 confirmed cases of measles, with onset of rash from July 16 through November 11, 1981, were reported from Lee County.

The source of the outbreak was not clearly determined, although at least 3 independent introductions of measles into the county have been documented. Most of the cases were attributed to transmission from an 11-year old resident who infected several other children at an indoor skating rink. The child also exposed members of a drum and bugle corps. Following several generations of the disease during the summer months, an outbreak with school-based transmission developed within 1 incubation period after the opening of schools on August 24.

Of 88 persons with measles, 18 (20.5%) were 0-4 years old, 19 (21.6%) were 5-9 years old, 14 (15.9%) were 10-14 years old, 27 (30.7%) were 15-19 years old, and 10 (11.4%) were $\geq$ 20 years old. Fifty persons (56.8%) were attending school or day-care centers at the time they became ill with measles: 21 in high schools, 2 in middle schools, 20 in elementary schools, and 7 in day-care centers.

Local authorities initially responded to the outbreak by ordering a review of 35,000 student immunization records to identify all students who did not have adequate evidence of immunity to measles. (Defined by the state of Florida as a record of measles vaccination with date of administration on or after the first birthday and after December 31, 1967, or a history of physician-diagnosed measles.)

Three high schools in which there were measles cases excluded susceptible students. Ultimately, students from 5 high schools, 2 middle schools, 11 elementary schools, and 3 day-care centers throughout the county had measles. On October 12 a county-wide school exclusion order went into effect. Students, including those with medical or religious exemptions from vaccinations, who could not show adequate evidence of immunity were not allowed to enter school. Special programs were conducted to review records and to administer vaccines.

At the time of initial record review in the 3 high schools, approximately 50% of the students lacked adequate evidence of immunity to measles. Many records were merely certificates of immunization without vaccination dates and thus were unacceptable documentation of immunity. By the first day of school exclusion, however, only 5%-10% of the students lacked adequate records.

Daily adjustments were made to each school's exclusion list as students returned with completed vaccination records. A sharp decline in the number of students excluded from school occurred over the first 3 school days after the exclusion policy was implemented. According to data from all 5 high schools, 7 of 9 middle schools, and 25 of 28 elementary schools, by the end of the third day, less than 1% of enrolled students were out of school because of inadequate evidence of immunity to measles. The number of excluded students declined on each subsequent day. Implementation of the school-exclusion policy resulted in only minimal disruption of school attendance and activities.

EDITORIAL NOTE: The outbreak in Lee County illustrates that schools are an important source of measles transmission in Florida, where a strengthened school immunization law was enacted this year (1). Although widespread transmission of measles occurred in schools throughout the county, application of the emergency provisions of the law effected swift control of the outbreak. Control measures were successful because of close cooperation among the county school board, the county health department, private physicians, and the public.

Exclusion from school attendance resulted in only brief absences for most of the susceptible students. In several schools the number of medical and religious exemptions also declined, suggesting that some individuals reconsidered the importance of vaccination in the face of a measles outbreak. Most students lacking evidence of measles immunity complied with the requirements and were quickly readmitted to school. This has been noted in other outbreaks where a school-exclusion policy has been employed (2-4).

Additional evidence from Florida demonstrates the importance of school-based control measures. In a review of 219 of the 222 confirmed measles cases in Florida reported during the first 34 weeks of 1981, ending August 29, cases were studied with respect to age, school and day-care center attendance, and immunity status. Of 219 persons with measles, 165 (75.3%) were between 5 and 19 years of age. The school-age population therefore accounted for the majority of measles cases. Of the 165 measles cases among school children, 107 (64.8%) were potentially preventable because the students lacked adequate evidence of immunity to measles. (Documentation of live measles vaccine administered on or after the first birthday or history of physician-diagnosed measles.) An additional 43 patients (19.6% of 219 cases studied) were under five years of age. Of these, only 8 who were enrolled in day-care centers and were old enough to receive measles vaccine potentially could have been reached by school-based control measures.

The available data suggest that Florida has chosen the most effective way to prevent measles - vigorous application of the new school immunization law with exclusion of non-compliant students from school (5). Beginning with the 1982-83 school year another provision of the law will require all students from kindergarten through 12th grade to show adequate evidence of immunity to measles and other vaccine-preventable diseases in order to attend school. Widespread use of the powers granted by the school immunization law will be an important part of the strategy to eliminate measles in Florida.

References

1. Florida Statutes, §232.032, 1980 Supplement; amended 7/2/81, CS/HB 559.
2. Middaugh JP, Zyla LD. Enforcement of school immunization law in Alaska. JAMA 1978;239;2128-30.
3. CDC. Enforcement of a state's immunization law for entering school children--Detroit. MMWR 1978;27:7.
4. CDC. School immunization requirements for measles--United States. 1981. MMWR 1981;30:158-60.
5. Robbins KB, Brandling-Bennett AD, Hinman AR, Low measles incidence: association with enforcement of school immunization laws. AM J Public Health 1981;71:270-4.

(Adapted from MMWR Dec. 11, 1981, Vol. 30/No. 48)

ACUTE HEMORRHAGIC CONJUNCTIVITIS - KEY WEST

An outbreak of acute hemorrhagic conjunctivitis (AHC) in Key West, Florida, a city of 24,292 people, is under investigation by county and state health officials. In the period September 4-14, 1981, 60 cases were reported - many among school-age and pre-school-age children. The one practicing ophthalmologist in Key West described the illness as being characterized by sudden onset, bilateral involvement, often with subconjunctival hemorrhage, and usually with recovery after a 3-5 day course. Secondary cases in households have been common. There have been no reports of radiculomyelitis.

Health officials report that a large outbreak of conjunctivitis also occurred in Key West in May-June 1981, but illness in the earlier outbreak was not characterized by subconjunctival hemorrhage.

EDITORIAL NOTE: This outbreak may represent a northward extension of the large outbreak of hemorrhagic conjunctivitis recently reported from the following countries in South and Central America (1): Belize, Brazil, Colombia, Cuba, Guyana, Honduras, Surinam, Guatemala, and Trinidad and Tobago. In this area of the Western Hemisphere, AHC was first recognized in Macapa at the mouth of the Amazon River in Brazil in late February 1981. It soon spread to the cities of Belem and Manaus. The attack rate for affected populations was greater than 40%. Concurrent with outbreak in the Western Hemisphere, extensive epidemics of AHC were occurring in India and Pakistan in May and June.

Serologic tests of 20 pairs of acute- and convalescent-phase serum specimens from Belem and Macapa, Brazil, revealed 3 with a 4-fold rise in hemagglutination-inhibition, titer to adenovirus 8, 1 with seroconversion to adenovirus 7, and 6 with a 4-fold rise in serum neutralization titer to enterovirus 70. Three of 9 convalescent-phase serum specimens from northern Honduras showed high titers (80) to enterovirus 70. These results, although preliminary, suggest that these outbreaks may be caused by more than 1 viral agent (2).

References

1. CDC. Acute hemorrhagic conjunctivitis--Latin America. MMWR 1981;30:450-1.
2. Arnow PM, Hierholzer JC, Higbee J, Harris DH. Acute hemorrhagic conjunctivitis: a mixed virus outbreak among Vietnamese refugees on Guam. Am J Epidemiol 1977;105:68-74.

(Adapted from MMWR Sept. 18, 1981, Vol. 30/No. 36)

ACUTE HEMORRHAGIC CONJUNCTIVITIS

Additional cases of acute hemorrhagic conjunctivitis (AHC) have recently been reported from 2 areas in Florida.

In the period September 4-September 21, 1981, the Monroe County Health Department received reports that 362 cases of illness compatible with AHC had occurred in the municipality of Key West, Florida. An initial survey of 78 families reporting to the health department for treatment revealed a total of 129 cases. Ninety-eight (76%) of the patients were black, 25 (19%) were white, and 6 (5%) were Hispanic. Seventy-five patients (58%) were female, and 54 (42%) were male. Patients ranged in age from 9 months to 75 years. The geographic distribution of the 78 families surveyed was confined to 2 of 40 census tracts, and most cases occurred in 2 neighboring housing projects. Cases continued to occur at the same time.

Beginning on September 8, cases of AHC were reported from Dade County. The Department of Ophthalmology, University of Miami, continue to report 15-65 cases per day. A total of 259 cases were seen between September 15 and September 21. A review of 57 patients selected at random revealed that 93% had bilateral conjunctival injection and irritation, 91% had subconjunctival hemorrhage, 96% had excessive tearing, 77% had preauricular lymphadenopathy, and 66% had lid edema; none of the patients had fever or symptoms of upper respiratory infection. These 57 patients ranged in age from 9 weeks to 81 years; 92.6% were black and 5.4% were white; female:male ratio was 1.7:1. The incubation period was estimated to be less than 24 hours in most cases, and the secondary attack rate for affected families was high.

EDITORIAL NOTE: Extensive outbreaks of AHC have been reported this year from India and Latin America.[1] At this time, health officials from only Miami and Key West, have reported significant outbreaks in the United States.[2] Factors influencing spread in the United States are, as yet, unknown; however, it is believed that high-density coastal populations in humid areas are at higher risk. Good hand-washing practices have prevented spread among medical personnel and should also be encouraged among contacts of patients with AHC. Because the duration of illness is usually less than 1 week, and no long-term ophthalmologic sequelae have been reported, the best treatment is supportive. Physicians are encouraged to report outbreaks of conjunctivitis consistent with AHC to their local and state health departments.

References

1. CDC. Acute hemorrhagic conjunctivitis--Latin America. MMWR 1981;30:450-1.
2. CDC. Acute hemorrhagic conjunctivitis--Key West, Florida. MMWR 1981;30:463-4.

(Adapted from MMWR Sept 25, 1981, Vol. 30/No. 37)

ISOLATION OF ENTEROVIRUS 70 FROM PATIENT WITH ACUTE HEMORRHAGIC CONJUNCTIVITIS-KEY WEST

The first isolation of an enterovirus 70 (EV 70) transmitted in the Western Hemisphere had been made at CDC from an eye swab obtained from a 16 year-old female Key West High School student associated with an outbreak of acute hemorrhagic conjunctivitis reported earlier.[1-2] The virus was isolated by direct inoculation of the specimen into human embryonic lung fibroblast cells and identified by serum neutralization and immunoelectron microscropy. The swab specimen was obtained approximately 12 hours after the acute onset of bilateral conjunctivitis, subconjunctival hemorrhage, and profuse watery discharge. The illness resolved in 6 days.

References
1. CDC. Acute hemorrhagic conjunctivitis--Key West, Florida. MMWR 1981;30:463-4.
2. CDC. Acute hemorrhagic conjunctivitis--Florida. MMWR 1981;30:465-6.

(Adapted from MMWR October 9, 1981, Vol. 30/No. 39)

ACUTE HEMORRHAGIC CONJUNCTIVITIS

The following reports summarize the most recent findings on acute hemorrhagic conjunctivitis (AHC) in Florida.[1-3]

In the period September 8-October 9, more than 3,500 cases of illness compatible with AHC were reported to the Dade County Health Department, Miami. Demographic data have been collected for approximately 1,000 cases: these patients range in age from 7 days to 85 years; 92% are black, 4.8% are white, and 2.5% are Spanish; the female:male ratio is 1.4:1. Seventy-two percent of these patients had onset of illness before September 25. Although AHC has been identified in every area of Dade County, most patients with reported cases reside in a poor, predominantly black section of northwest Miami. Active surveillance continues in schools, clinics, emergency rooms, and offices of private physicians; between 50-100 cases per week continued to be reported through the week ending October 9.

In the period September 4-October 9, 732 cases of AHC were reported to the Monroe County Health Department. Although the outbreak was initially confined to a small geographic area within Key West, substantial transmission to other areas has occurred. Approximately 20 cases continue to be reported daily.

Illness compatible with AHC has also been reported in 8 other counties in southern Florida. Most of these patients reside in Broward County, where 929 cases (783 children, 146 adults) were reported between September 22-October 9.

EDITORIAL NOTE: The clinical and epidemiologic features of AHC in the United States appear similar to those reported in other countries,[4,5] and include affliction of all age groups, a short incubation period, rapid secondary transmission in crowded settings, lack of systemic symptoms and signs, and resolution within 4 to 10 days. The outbreak in southern Florida appears to have declined in some areas, but transmission still continues to occur in all affected areas. Surveillance for AHC should be continued among persons exposed to ill persons in Miami or Key West; cases that occur

in other parts of Florida and possibly other states should be reported to local or state health departments.

Factors influencing the occurrence and spread of AHC in the United States, including seasonal conditions, remain unknown. Exclusion of persons with suspected AHC from school or work in Dade and Monroe Counties may have curtailed the geographic spread of illness, but may have increased attack rates within affected families. Factors which may contribute to intra-familial spread, including hygienic practices, are presently being assessed in retrospective case-control studies in Miami and Key West.

References

1. CDC. Acute hemorrhagic conjunctivitis--Key West, Florida. MMWR 1981;30:463-4.
2. CDC. Acute hemorrhagic conjunctivitis--Florida. MMWR 1981;30:465-6.
3. CDC. Isolation of enterovirus 70 from a patient with acute hemorrhagic conjunctivitis--Key West, Florida. MMWR 1981;30:497.
4. CDC. Acute hemorrhagic conjunctivitis--Latin America. MMWR 1981;30:450-1.
5. CDC. Acute hemorrhagic conjunctivitis--Panama and Belize. MMWR 1981;30:497-8.

(Adapted from MMWR October 16, 1981, Vol. 30/No. 40)

ENTEROVIRUS-ASSOCIATED ILLNESS

Outbreaks of enterovirus-associated meningitis have been reported recently from Palm Beach County.

Palm Beach County: Routine county surveillance has uncovered 65 patients with aseptic meningitis and 3 with encephalitis hospitalized between April 5 and July 26, 1981; an additional 23 probable cases are being followed. The number of cases has increased this year compared with previous years. In 1979, 12 cases were reported during the same time period and in 1980, 21 cases were reported. Nearby counties have not reported similar increases. To date, enteroviruses have been isolated from 12 patients. Seven cases were associated with echovirus 30, 2 cases with echovirus 9, 1 case with echovirus 14, and 2 cases with Coxsackie A4. One of the encephalitis cases was in a 7-month old. previously healthy infant initially diagnosed as a victim of sudden infant death syndrome after he was found dead in his crib one morning. Coxsackie A4 was isolated from brain tissue obtained at autopsy.

EDITORIAL NOTE: Enterovirus-associated cases of aseptic meningitis are reported during the summer months each year. Cases are usually identified beginning in May, generally peak in August, and decrease in late October. Community-wide and regional outbreaks are common and may last for 1 or 2 months. Mild clinical illnesses are reported by other community residents. Outbreaks most often are caused by multiple agents with 1 serotype predominating.

Echovirus 30 is the serotype most frequently isolated from cases reported in the outbreaks in 1981. Echovirus 30 was first recognized in association with an aseptic meningitis outbreak in Scotland in 1959.[1] Similar outbreaks were reported in New York in 1959,[2] Ontario in 1959-1960,[3] and Minnesota in 1960.[4] In 1968, 431 cases of echovirus 30 associated aseptic meningitis were reported to CDC and constituted 64% of the aseptic meningitis cases characterized by isolation of an enterovirus.[5] Between 1970 and 1977, sporadic cases of aseptic meningitis associated with echovirus 30 were reported. Beginning in 1978 the number of cases of echovirus 30 associated aseptic meningitis increased from an average of 7 cases per year (range 1 to 12) to 49 cases in 1979. In 1980, echovirus 30 was the third most frequently reported enterovirus associated with aseptic meningitis. Coxsackie B3 and echovirus were the first and second most frequent agents, respectively.

Echovirus 30, like many of the enteroviruses, causes illness ranging from minor febrile illness to paresis. In 1980, echovirus 30 associated illnesses included encephalitis, aseptic meningitis, carditis, respiratory tract illness, and gastroenteritis. Echovirus 30 isolates were reported from all areas of the country, but 42% (50/120) of all echovirus 30 isolates were from the South Atlantic states of North Carolina, Georgia, and Florida, representing 26% of the enterovirus isolates from those states. Twenty-one percent of echovirus 30 isolates were from the Mid-Atlantic Region, but these isolates constituted only 5% (26/529) of the nonpolio-enteroviruses from that region.

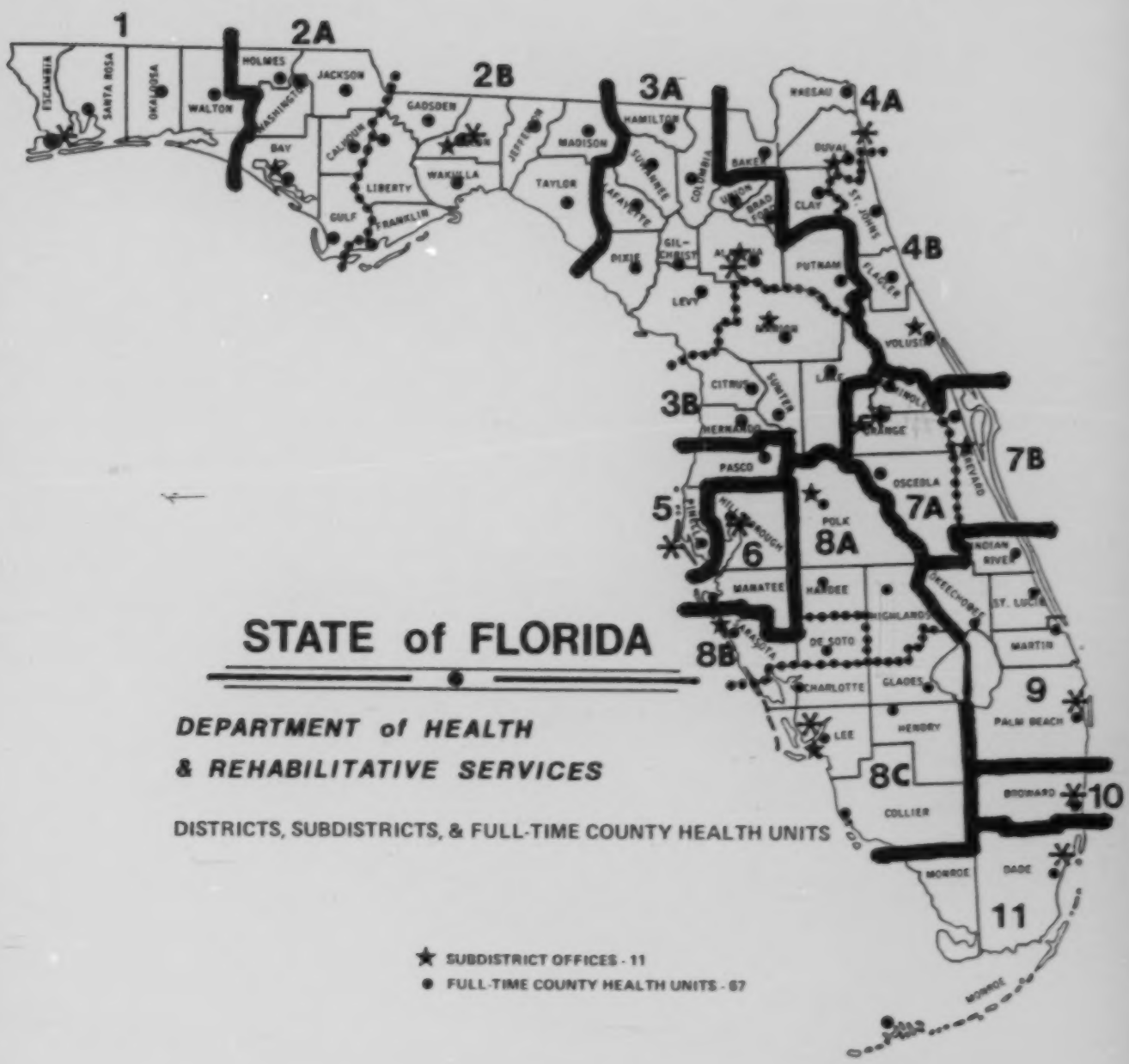
Since 1970, stool specimens have been the most frequent source of isolation. Between 1970 and 1980, 40% (196/496) of the echovirus 30 isolates were from stool specimens or rectal swabs, 21% (104/496) from CSF, 19% (96/496) from throat, 16% (82/496) from tissues, 1% (3/496) from nasopharynx, 1% from urine, 5% from other sources. The presence of an enterovirus in the alimentary tract, however,

does not constitute proof of an etiologic role of the virus in clinical illness. Isolation of the virus from specific tissues that are presumably infected, or from CSF - in the case of meningitis - is needed.

References

1. Duncan IB. Aseptic meningitis associated with a previously unrecognized virus. Lancet 1960;2:470-1.
2. Plager H, Decher W. A newly-recognized enterovirus isolated from cases of aseptic meningitis. American Journal of Hygiene 1963;77:26-8.
3. Kelen A, Lesiak J, Labzoffsky NA. Aseptic meningitis due to Frater type virus in Ontario. Can Med Assoc J 1963;89:29-30.
4. Kleinman H, Cooney MK, Nelson CB, Owen RR, Boyd L, Swanda G. Aseptic meningitis and paralytic disease due to newly recognized enterovirus. JAMA 1964;187:90-5.
5. Likosky WH, Emmons RW, Davis LE, et al. U.S. cases in 1968: epidemiology of echovirus 30 aseptic meningitis. Health Services Reports 1972;87:638-42.

(Adapted from MMWR August 14, 1981, Vol. 30/No. 31)



Note: Above map reflects district boundaries in 1981.
Effective 10/1/83, District 8A became part of District 6.

ALPHABETICAL LIST OF FLORIDA COUNTIES WITH 1981 POPULATIONS AND DISTRICT NUMBERS

COUNTY	POPULATION	DISTRICT
Alachua	155,044	3A
Baker	15,929	4A
Bay	100,787	2A
Bradford	20,142	3A
Brevard	283,630	7B
Broward	1,054,577	10
Calhoun	9,407	2A
Charlotte	62,342	8C
Citrus	60,374	3B
Clay	70,418	4A
Collier	92,370	8C
Columbia	35,920	3A
Dade	1,741,714	11
DeSoto	19,457	8B
Dixie	8,244	3A
Duval	577,104	4A
Escambia	240,790	1
Flagler	12,448	4B
Franklin	7,750	2B
Gadsden	42,186	2B
Gilchrist	6,448	3A
Glades	6,186	8C
Gulf	10,644	2A
Hamilton	8,691	3A
Hardee	20,009	8A
Hendry	19,650	8C
Hernando	49,847	3B
Highlands	50,317	8A
Hillsborough	664,814	6
Holmes	15,011	2A
Indian River	63,901	9
Jackson	39,819	2A
Jefferson	10,757	2B
Lafayette	4,008	3A
Lake	108,861	3B
Lee	217,267	8C
Leon	152,956	2B
Levy	20,738	3A
Liberty	4,303	2B
Madison	15,140	2B
Manatee	155,738	6
Marion	131,028	3B
Martin	68,458	9
Monroe	64,413	11
Nassau	33,924	4A
Okaloosa	113,611	1
Okeechobee	21,358	9
Orange	484,410	7A
Osceola	56,843	7A
Palm Beach	624,740	9
Pasco	207,337	5
Pinellas	746,993	5
Polk	333,124	8A
Putnam	51,410	3A
St. Johns	54,300	4B
St. Lucie	96,613	9
Santa Rosa	57,509	1
Sarasota	211,252	8B
Seminole	188,612	7A
Sumter	25,032	3B
Suwannee	23,545	3A
Taylor	16,985	2B
Union	10,449	3A
Volusia	270,528	4B
Wakulla	10,951	2B
Walton	21,800	1
Washington	14,902	2A
STATE TOTAL*	10,195,865	

*State population increased 3.9 percent from 1980.

SECTION 1:

Summary of Selected Notifiable Diseases

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, FLORIDA, 1981

DISEASES	Totals	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
Encephalitis, Post-Infectious	23	2	2	3	4	1	2	3	0	2	2	1	1	0
Encephalitis (other, excluding arthropod borne)	46	2	5	0	5	2	5	4	5	6	2	6	3	1
Hepatitis A	1509	134	102	127	118	160	123	149	126	120	124	91	80	55
Hepatitis B	1512	96	100	104	92	123	108	103	92	125	117	103	96	253
Hepatitis Asso. w/Blood or Blood Products	74	1	4	4	6	6	4	1	8	9	5	10	7	9
Hepatitis Not Asso. w/Blood or Blood Products	105	1	0	1	5	12	9	14	15	5	13	11	12	7
Hepatitis, Unspecified	530	45	45	45	43	44	31	37	40	42	40	19	39	60
Influenza (Confirmed)	282	180	49	8	7	1	2	3	1	0	2	0	9	20
Legionnaires' Disease	22	1	0	2	0	2	1	5	4	2	1	0	2	2
Malaria	49	6	4	7	5	4	4	4	4	3	0	4	0	4
Measles (Rubeola)	345	18	49	65	42	20	7	20	25	43	36	19	0	1
Meningitis, Aseptic	673	16	21	29	38	55	94	99	90	78	60	45	28	20
Meningitis, Meningococcal	256	51	43	26	18	15	5	18	10	14	18	14	16	8
Meningitis, Other Bacterial	551	56	51	68	49	39	35	32	38	37	41	35	47	23
Mumps	145	19	21	12	12	8	8	7	11	10	12	12	5	8
Pertussis	78	3	3	5	3	8	11	11	16	8	1	5	2	2
Reye Syndrome	18	4	0	2	2	0	3	0	2	0	2	1	2	0
Rubella (Excluding Congenital)	67	10	12	9	11	4	3	4	2	1	5	4	1	1
Salmonellosis	2194	96	94	97	146	132	156	229	252	217	203	187	123	262
Shigellosis	784	31	31	57	41	51	121	53	70	96	45	47	46	95
Typhoid Fever	27	2	1	5	0	4	3	4	3	2	0	0	0	3

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES, FLORIDA, 1972-1981

DISEASES	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972
Chickenpox	+	8707	6643	4757	4953	4572	3607	4327	4941	3950
Encephalitis, Post-Infectious	23	21	12	6	8	19	37	36	5	27
Encephalitis (other, excluding arthropod borne)	46	59	55	92	42	26	44	54	43	43
Hepatitis A **	1509	2278	1883	1755	1375	2360	2967	4079	3524	2459
Hepatitis B	1512	1222	981	966	796	774	613	562	439	401
Hepatitis Asso. w/Blood or Blood Products	74	51	82	+	+	+	+	+	+	+
Hepatitis Not Asso. w/Blood or Blood Products	105	+	+	+	+	+	+	+	+	+
Hepatitis, Unspecified	530	788	741	583	400	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Gonorrhea	60363	65437	61427	60377	58839	58921	65031	61507	52582	43688
Influenza (Confirmed)	282	106	78	+	+	+	+	+	+	+
Legionnaires' Disease	22	12	47	+	+	+	+	+	+	+
Malaria	49	86	32	40	23	22	12	8	9	16
Measles (Rubeola)	345	432	938	1203	308	342	116	237	369	1460
Meningitis, Aseptic	673	654	319	311	258	189	195	248	263	218
Meningitis, Meningococcal	256	218	203	232	131	90	91	95	55	81
Meningitis, Other Bacterial	551	487	424	+	+	+	+	+	+	+
Mumps	145	195	216	318	285	387	1231	2003	2682	1525
Pertussis	78	68	51	62	75	18	25	30	40	72
Reye Syndrome	18	21	13	7	6	5	8	14	0	3
Rubella (Excluding Congenital)	67	109	318	214	197	53	153	205	1066	1913
Salmonellosis	2194	2031	1853	1624	1192	1252	1269	1182	1068	1466
Shigellosis	784	927	808	857	498	315	488	730	664	863
Syphilis (All Stages)	5971	4384	4567	4648	4543	5528	6328	5518	4339	3691
Tuberculosis ++	1553	1647	1628	1724	1531	1497	1639	1460	1487	1517
Typhoid Fever	27	16	23	19	20	19	8	16	222	10

**Includes Hepatitis Unspecified 1971 - 1976
+Not reported This Year
xxxxxIncluded in Hepatitis A
++Since 1978, Includes New and Reactivated Cases

REPORTED CASE RATES PER 100,000 POPULATION FOR SELECTED NOTIFIABLE DISEASES, FLORIDA, 1972-1981

DISEASES	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972
Chickenpox	+	88.7	71.5	53.1	56.8	53.5	42.5	52.5	63.0	53.1
Encephalitis, Post-Infectious	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.4	0.1	0.4
Encephalitis (other, excluding arthropod borne)	0.5	0.6	0.6	1.0	0.5	0.3	0.5	0.7	0.5	0.6
Hepatitis A **	14.8	23.2	20.3	19.6	15.8	27.6	35.0	49.4	44.9	33.0
Hepatitis B	14.8	12.5	10.6	10.8	9.1	9.1	7.2	6.8	5.6	5.4
Hepatitis Asso. w/Blood or Blood Products	0.7	0.5	0.9	+	+	+	+	+	+	+
Hepatitis Not Asso. w/Blood or Blood Products	1.0	+	+	+	+	+	+	+	+	+
Hepatitis, Unspecified	5.2	8.0	8.0	6.5	4.6	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Gonorrhea	597.0	666.8	660.9	673.4	675.0	689.0	766.4	745.6	670.3	587.1
Influenza (Confirmed)	2.8	1.1	0.8	+	+	+	+	+	+	+
Legionnaires' Disease	0.2	0.1	0.5	+	+	+	+	+	+	+
Malaria	0.5	0.9	0.3	0.4	0.3	0.3	0.1	0.1	0.1	0.2
Measles (Rubeola)	3.4	4.4	10.1	13.4	3.5	4.0	1.4	2.9	4.7	19.6
Meningitis, Aseptic	6.6	6.7	3.4	3.5	3.0	2.2	2.3	3.0	3.4	2.9
Meningitis, Meningococcal	2.5	2.2	2.2	2.6	1.5	1.1	1.1	1.2	0.7	1.1
Meningitis, Other Bacterial	5.4	5.0	4.6	+	+	+	+	+	+	+
Mumps	1.4	2.0	2.3	3.5	3.3	4.5	14.5	24.3	34.2	20.5
Pertussis	0.8	0.7	0.5	0.7	0.9	0.2	0.3	0.4	0.5	1.0
Reye Syndrome	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0	-
Rubella (Excluding Congenital)	0.7	1.1	3.4	2.4	2.3	0.6	1.8	2.5	13.6	25.7
Salmonellosis	21.5	20.7	19.9	18.1	13.7	14.6	15.0	14.3	13.6	19.7
Shigellosis	7.7	9.4	8.7	9.6	5.7	3.7	5.8	8.8	8.5	11.6
Syphilis (All Stages)	59.1	44.7	49.1	51.8	52.1	64.6	74.6	66.9	55.3	49.6
Tuberculosis ++	15.3	16.8	17.5	19.2	17.6	17.5	19.3	17.7	19.0	20.4
Typhoid Fever	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	2.8	0.1

**Includes Hepatitis Unspecified 1971 - 1976
+Not reported This Year
xxxxxIncluded in Hepatitis A
++Since 1978, Includes New and Reactivated Cases

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA 1967 - 1981

DISEASE	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	Not Reported Prior to	Year Last Case Reported
Amebiasis	59	45	33	22	19	15	17	13	21	23	12	21	34	22	39		
Anthrax	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
Botulism	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1961	
Cat Scratch Fever	19	39	30	5	0	6	0	2	1	1	3	0	0	0	0	1962	
Chancroid	1	57	28	11	9	40	104	135	143	195	208	284	113	41	56		
Cholera (Group 01)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1937
Congenital Rubella	1	2	4	1	0	1	0	1	1	0	1					1971	
Cryptococcosis	3	6	2	2	2	1	3	2	1	1	2	1	4	1	2	1962	
Dengue	13	1	0	7	3	0	0	0	1	0	0	0	2	0	0		
Diphtheria	1	0	0	0	0	0	0	0	7	5	5	14	22	16	7		
Glanders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918
Granuloma Inguinale	103	0	0	1	3	1	3	3	5	10	18	24	11	34	31		
Histoplasmosis	2	1	4	1	3	1	1	1	25	0	3	1	0	2	2	1957	
Hansen's Disease(Leprosy)	1	4	9	2	3	5	9	7	4	1	7	4	12	11	5		
Leptospirosis	6	11	18	22	8	1	13	8	3	8	10	10	14	18	8	1950	
Polio	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0		
Psittacosis	3	5	0	3	4	3	1	4	1	0	0	0	2	0	1	1954	
Rabies (Human)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1948
Relapsing Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918
Rocky Mt. Spotted Fever	14	9	10	12	2	4	6	2	3	1	2	1	1	3	0	1947	
Schistosomiasis	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1965	
Smallpox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1946
Tetanus	5	4	8	10	14	9	5	10	10	10	13	16	12	11	24		
Toxoplasmosis	25	32	6	2	1	0	0	2	0	0	1	0	2	0	0	1964	
Tularemia	1	0	0	2	0	1	2	0	2	1	2	2	3	1	1		
Typhus Fever (Murine)	1	0	1	1	0	0	1	0	0	0	0	1	0	3	2	1946	
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918

SECTION 2:

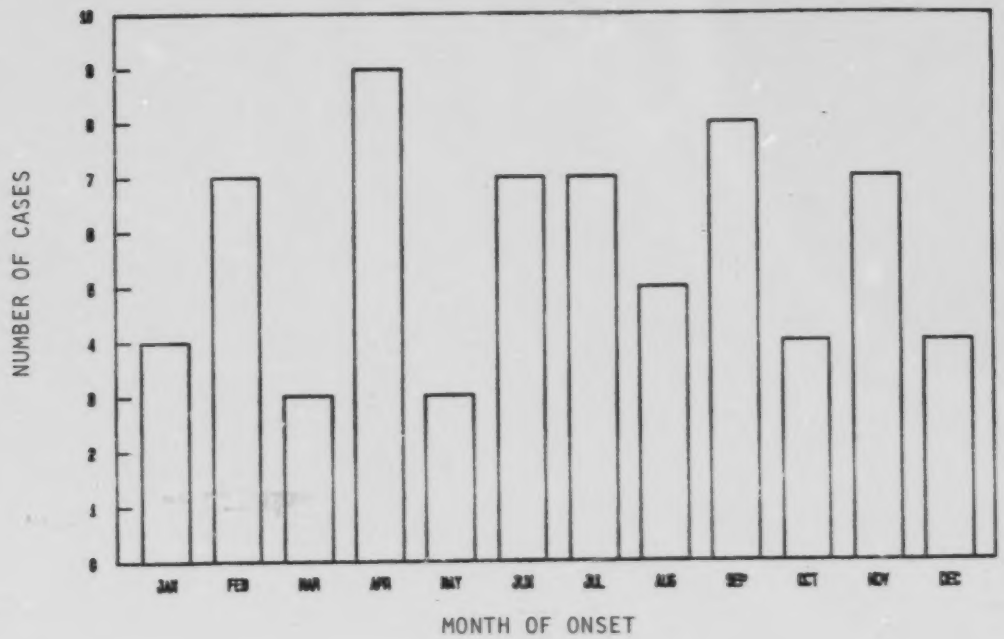
Analysis of Selected Notifiable Diseases

ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) -
REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

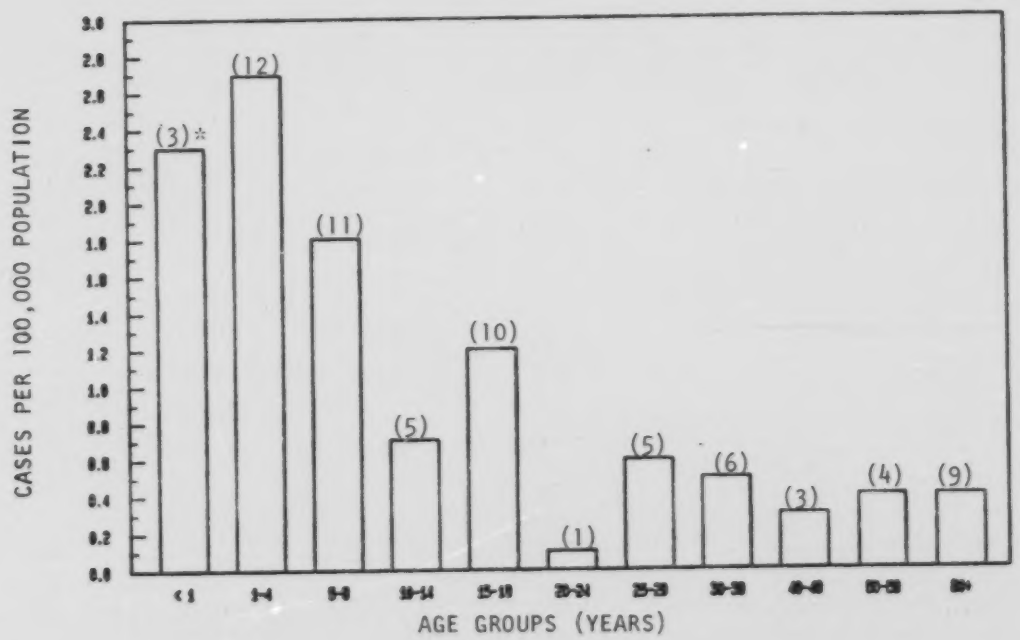
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN
Alachua				1										1	0.6	--
Baker															0.0	--
Bay															0.0	--
Bradford															0.0	--
Brevard						2		1	1					4	1.4	--
Broward						2	3	1						6	0.6	--
Calhoun															0.0	--
Charlotte															0.0	--
Citrus															0.0	--
Clay															0.0	--
Collier											1			1	1.1	--
Columbia															0.0	--
Dade	1											1		2	0.1	--
DeSoto															0.0	--
Dixie															0.0	--
Duval															0.0	--
Escambia															0.0	--
Flagler															0.0	--
Franklin															0.0	--
Gadsden															0.0	--
Gilchrist															0.0	--
Glades							1							1	16.2	--
Gulf															0.0	--
Hamilton															0.0	--
Hardee															0.0	--
Hendry															0.0	--
Hernando								1	1					2	4.0	--
Highlands															0.0	--
Hillsborough	1	1							1		1	1		5	0.8	--
Holmes															0.0	--
Indian River							1	1						2	3.1	--
Jackson															0.0	--
Jefferson															0.0	--
Lafayette															0.0	--
Lake		1												1	0.9	--
Lee		2		1						1				4	1.8	--
Leon															0.0	--
Levy															0.0	--
Liberty															0.0	--
Madison															0.0	--
Manatee															0.0	--
Marion															0.0	--
Martin															0.0	--
Monroe															0.0	--
Nassau															0.0	--
Okaloosa															0.0	--
Okeechobee															0.0	--
Orange	2	1		5	1						1			10	2.1	--
Osceola		1									1			2	3.5	--
Palm Beach		1	1	1	2	1	1		4					11	1.8	--
Pasco															0.0	--
Pinellas										1		1		2	0.3	--
Polk			2			1				1	3	1	1	9	2.7	--
Putnam															0.0	--
St. Johns															0.0	--
St. Lucie									1					1	1.0	--
Santa Rosa															0.0	--
Sarasota															0.0	--
Seminole				1			1	1						3	1.6	--
Sumter															0.0	--
Suwanee															0.0	--
Taylor															0.0	--
Union															0.0	--
Volusia						1				1				2	0.7	--
Wakulla															0.0	--
Walton															0.0	--
Washington															0.0	--
STATE TOTAL	4	7	3	9	3	7	7	5	8	4	7	4	1	69	0.7	--

*Not available

ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

HEPATITIS A

In 1981, 1,509 cases of hepatitis A were reported to the Florida Uniform Statewide Communicable Disease Surveillance and Reporting System. Six deaths were attributed to hepatitis A during the year. There was a 33.8% decline from the total number of cases reported in 1980 (2,278). The case rate in 1981 (14.8 per 100,000) declined 36.2% from the rate in 1980 (23.2 per 100,000), and declined 23.3% from the 1978-80 three year mean rate (19.3 per 100,000). The 1981 rate is the lowest since 1976, and marks the first reversal of an upward trend of five years' duration (figure). The downturn in 1981 may be attributed in part to a recent emphasis on the early detection and control of day care center associated outbreaks of hepatitis A. The day care center is recognized as a major focus of transmission of hepatitis A in the community. The significance of the decline in the incidence of hepatitis A may be further appreciated by considering 1) the parallel decline in the incidence of cases in the hepatitis unspecified category, and 2) the recent, greater availability of diagnostic testing for hepatitis A. Epidemiologically, it appears likely that many cases of hepatitis unspecified were undiagnosed cases of hepatitis A.

Young adults aged 20-29 had the highest reported rate of illness (34.8 per 100,000) in 1981, consistent with the experience of this age group in previous years. As expected, low rates were reported for children less than 5 years of age who, when infected, frequently have subclinical infection or non-specific mild illness and are probably underdiagnosed. Within all age groups, the number of reported cases and case rates were lower in 1981 than in 1980.

Within all age groups from 15-49 years, the total number of reported cases and case rates were greater for males than females, a trend also observed in the national data. The observed difference was greatest in the 25-29 year age group. It is unclear whether sex-specific differences in reported rates were due to differences in disease presentation, infection rates, or exposure.

Of the 1,509 cases reported in 1981, 881 (58.4%) were reported by seven metropolitan counties, each having a population in excess of 250,000 (Broward, Dade, Hillsborough, Orange, Palm Beach, Pinellas and Volusia) and whose combined population equals 54.8% of the State's total population.

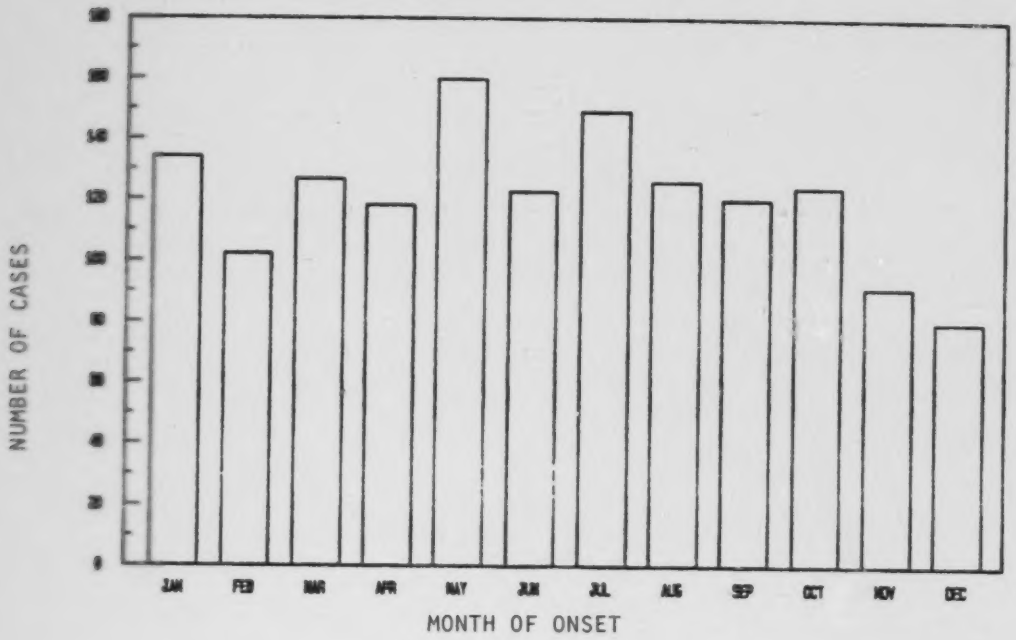
A CDC Viral Hepatitis Case Record Form was completed on 1254 (83.1%) of the 1,509 cases reported to the State, thereby entering these cases into the data system of the CDC National Hepatitis Surveillance Program. Of 1150 case reports analyzable for the question of prior personal contact with a known jaundiced person or with a case of hepatitis, 300 (26.1%) indicated such a history. Of 1167 analyzable responses, 267 (22.9%) indicated an association with a nursery or day care center.

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

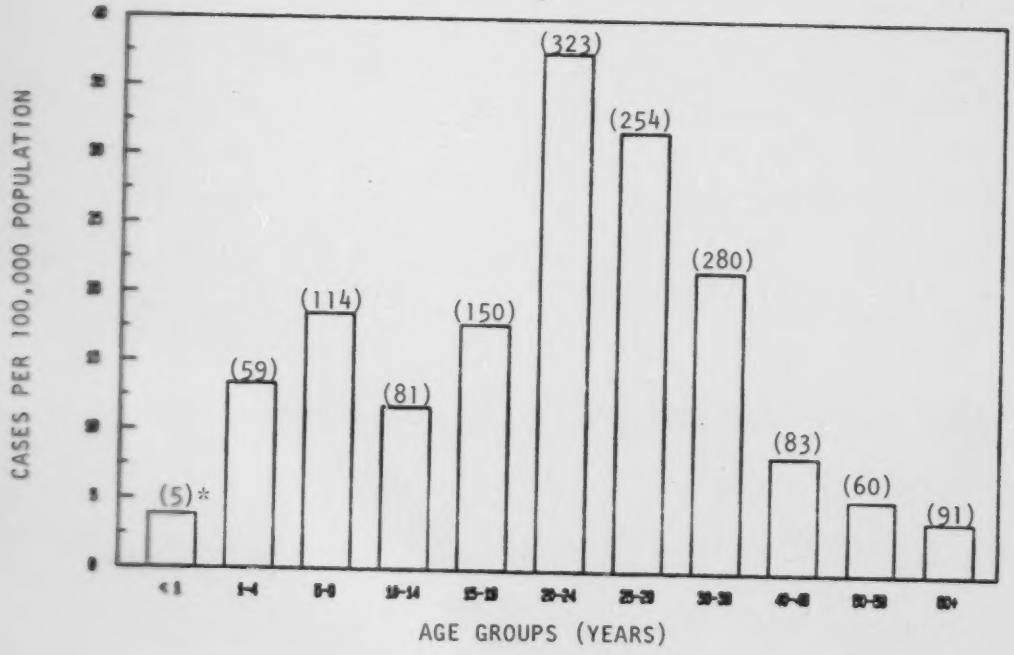
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua	2	1	1	1	1		1	2	1	1				10	6.4	14.4
Baker															0.0	9.2
Bay															0.0	7.6
Bradford															0.0	5.3
Brevard		1	2	1	2	5	4	2	2	3	1	4	3	30	10.6	5.4
Broward	19	19	18	16	12	20	23	26	28	15	19	9	7	231	21.9	17.0
Calhoun															0.0	3.7
Charlotte			1			1							1	3	4.8	8.4
Citrus			1		3		5	2			1			12	19.9	6.1
Clay	1						2							3	4.3	11.3
Collier	1	1		2			2	3		1	1	1		12	13.0	98.3
Columbia															0.0	11.9
Dade	10	9	15	6	12	8	8	6	6	4	7	4	13	108	6.2	11.8
DeSoto				1			2							3	15.4	40.5
Dixie															0.0	26.1
Duval	5		4	5		1	4	7	2	3	8	9	1	49	8.5	8.4
Escambia		2	1	1	1	2	2	1				2		12	5.0	7.9
Flagler				1				1						2	16.1	13.5
Franklin															0.0	4.2
Gadsden										1				1	2.4	2.5
Gilchrist															0.0	23.2
Glades															0.0	11.1
Gulf															0.0	12.3
Hamilton															0.0	3.8
Hardee				1										1	5.0	17.6
Hendry									2					2	10.2	5.6
Hernando					4	2				1	1	2		10	20.1	5.8
Highlands	1	1	1	2		2		2	2	1				12	23.8	33.2
Hillsborough	5	5	5	5	9	6	9	5	12	4	7	2	1	75	11.3	20.6
Holmes											1			1	6.7	6.9
Indian River															0.0	12.2
Jackson	1		1	4	2				1			1	2	12	30.1	14.6
Jefferson	1													1	9.3	6.3
Lafayette															0.0	8.0
Lake			3	7	24	8	3	1	1		1		1	49	45.0	15.7
Lee	2	1	2		4	2	2	1		1	1	1	7	24	11.0	29.2
Leon	1	1	1	2	1	2	7	10	4	1	3			33	21.6	20.5
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee	7	4	3	2	5	3	1	1	2	1		3	1	33	21.2	32.4
Marion				2		1	4		1	1	1		1	11	8.4	7.9
Martin	2	3	5	1	2	3	3	2	3	12	4	1		41	59.9	23.8
Monroe	9	1		2	14	8	3	2	1	4	2	5		51	79.2	58.4
Nassau		1					1							2	5.9	14.4
Okaloosa															0.0	2.1
Okeechobee	5	1							2					8	37.5	63.5
Orange	12	5	10	10	6	11	19	6	6	5	3	2	2	97	20.0	42.7
Osceola		1		2		1				1		1		6	10.6	20.0
Palm Beach	23	13	16	11	21	7	12	6	12	39	15	9	5	189	30.3	26.2
Pasco	2	3	10	7	2	5	4	4	1	3	2	1	1	45	21.7	13.5
Pinellas	1	1	3	4	3	3	3	3	4	1	3	5	1	35	4.7	14.3
Polk	3	3	3	2	6	5	3	2	4	1	3	4	1	40	12.0	42.1
Putnam	1	1												2	3.9	6.9
St. Johns			2							1				3	5.5	20.7
St. Lucie	1	1			1			3	1	5		3	1	16	16.6	15.2
Santa Rosa															0.0	4.9
Sarasota			1	2	3		2	2	2	2	2	3		19	9.0	19.4
Seminole	2	11	4	10	4	4	8	2	5	2	2	2		56	29.7	57.5
Sumter		1	5		1									7	28.0	19.0
Suwanee									1					1	4.2	4.6
Taylor				1						1				2	11.8	14.6
Union	1	1												2	19.1	66.2
Volusia	16	10	9	7	17	13	13	23	14	9	3	6	6	146	54.0	79.0
Wakulla															0.0	142.0
Walton															0.0	1.6
Washington								1						1	6.7	6.7
STATE TOTAL	134	102	127	118	160	123	149	126	120	124	91	80	55	1509	14.8	20.9

* 1978 - 1980 Average Rate

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981

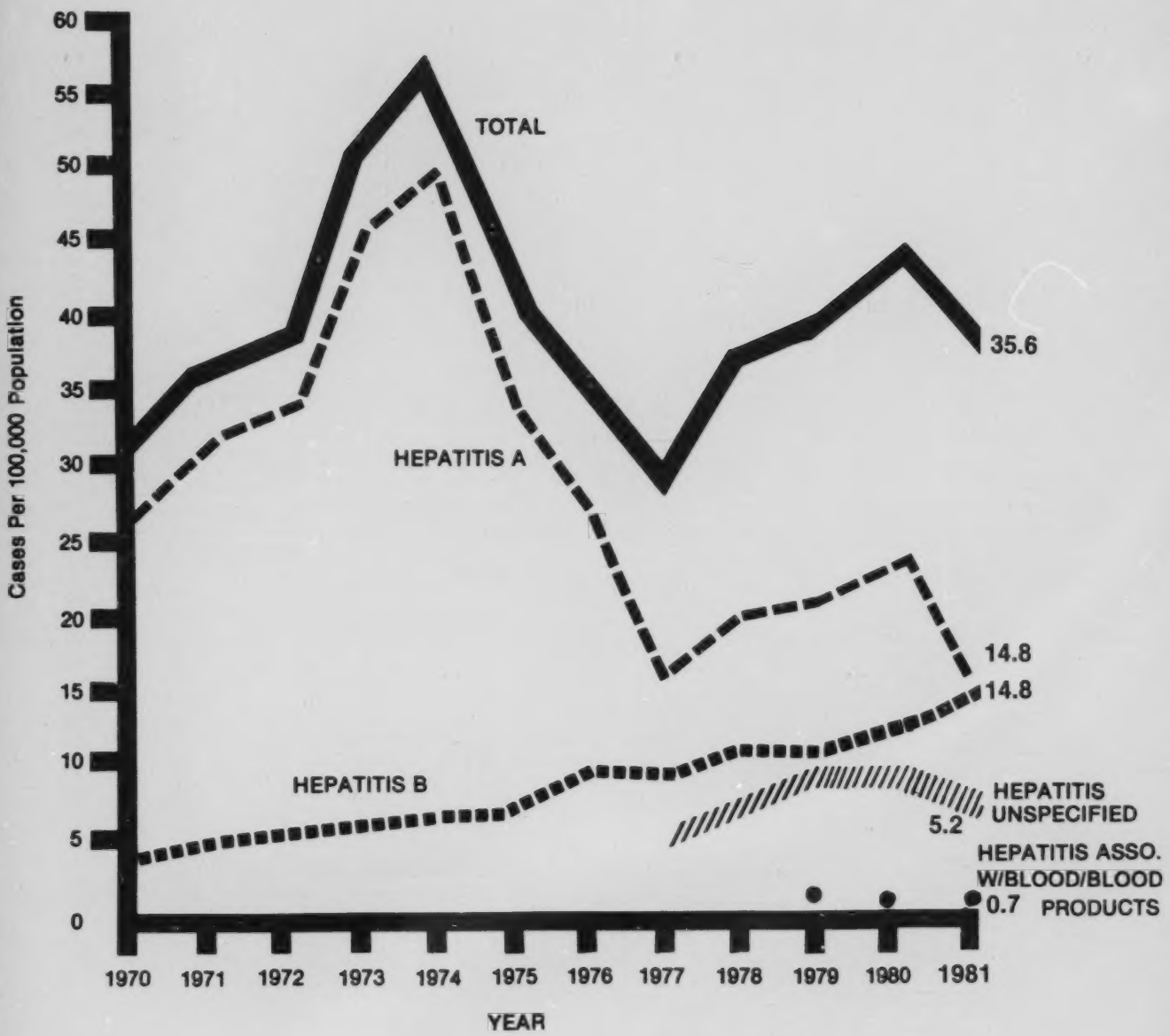


HEPATITIS A - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

HEPATITIS - Reported case rates by year, Florida, 1970-1981



HEPATITIS B

In 1981, 1,512 cases of hepatitis B were reported to the State, representing an increase of 23.7% over 1980 (1,222 cases) and a 43.2% increase over the previous three-year mean (1,056 cases). The annual incidence in 1981 was 14.8 cases per 100,000 population compared to 12.5 in 1980. Little variation by season was observed. The seven largest counties which reported the majority of cases of hepatitis A in 1980 also reported the majority of cases of hepatitis B (1,001 cases or 66.2% of the State's total). These counties were Broward, Dade, Hillsborough, Orange, Palm Beach, Pinellas, and Volusia, which collectively represent 54.8% of the State's total population. Nineteen deaths were attributed to hepatitis B in 1981.

The age group with the highest attack rate (45.5 per 100,000) was the 20-24 year olds, which is similar to previous years. Within this age group, 62.5% of the cases occurred in males. These findings are consistent with the national data.

Within the age groups of 15-39 years, the observed differences in rates for hepatitis B by age and sex may be attributable in part to differences in life styles, particularly given the well-documented risk factors of exposure to sexual contact (especially if numerous and even more so if homosexual), drug abuse, etc.

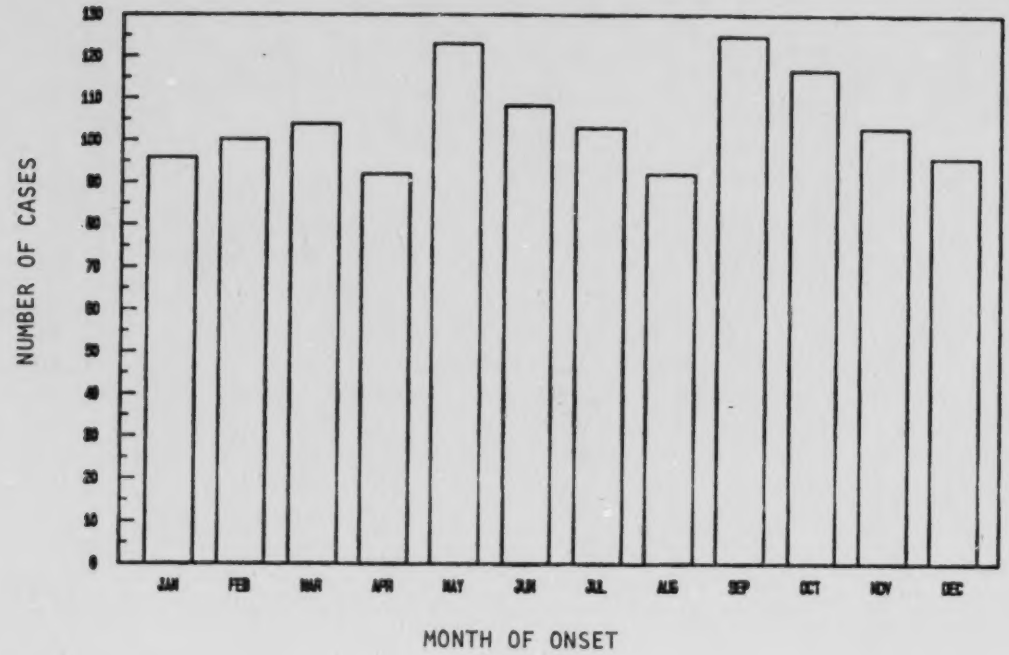
Of 1,512 cases reported, the CDC Viral Hepatitis Case Report Form was completed and submitted on 1,235 (81.7%) and entered into the CDC National Hepatitis Surveillance Program. Analysis of these data showed that a recent history of dental procedures was the most commonly reported epidemiologic characteristic -- 183 (18.9%) of 967 analyzable responses. Other exposures reported frequently were personal contact with a known case (132 out of 960 analyzable responses or 13.8%); surgery (95 out of 991 responses or 9.6%); transfusions (80 out of 994 responses or 8.0%), and drug abuse (90 out of 980 responses or 9.2%).

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

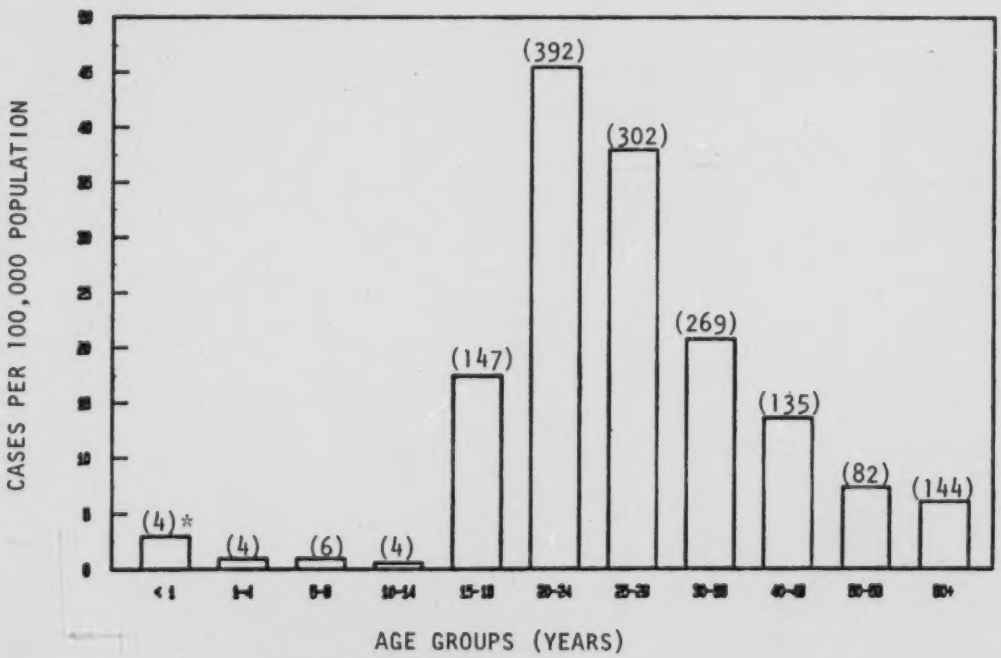
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
Alachua		2	2	3		2	1							10	6.4	13.7
Baker															0.0	2.3
Bay	1	2		1									2	6	6.0	4.5
Bradford	1													1	5.0	8.8
Brevard	1	2		1	3	4		2	1	4	2		8	28	9.9	9.4
Broward	14	13	15	12	14	8	13	12	23	16	20	18	30	208	19.7	14.7
Calhoun															0.0	11.0
Charlotte					1								1	2	3.2	9.5
Citrus						1								1	1.7	4.1
Clay					1	1								2	2.8	6.5
Collier											2	2		4	4.3	11.4
Columbia	1					1								2	5.6	3.0
Dade	12	12	13	12	20	8	15	10	12	14	5	10	117	260	14.9	12.3
DeSoto															0.0	12.3
Dixie															0.0	4.3
Duval	11	7	2	9	5	7	8	7	11	6	3	6	3	85	14.7	8.2
Escambia		1	2	2	2		5	1	1	3			3	20	8.3	3.0
Flagler					1			1						2	16.1	3.4
Franklin															0.0	4.2
Gadsden									1		1			2	4.7	10.0
Gilchrist															0.0	5.8
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton			1	1										2	23.0	0.0
Hardee															0.0	0.0
Hendry															0.0	3.7
Hernando					2	1		1						4	8.0	5.0
Highlands															0.0	0.0
Hillsborough	2	3	12	5	11	10	10	10	6	7	7	3	4	90	13.5	10.1
Holmes															0.0	0.0
Indian River						1				1	2		4	8	12.5	1.2
Jackson			1									1		2	5.0	5.1
Jefferson															0.0	0.0
Lafayette						1								1	25.0	0.0
Lake	2				1	1					1			5	4.6	6.0
Lee	2	4	2	4	3			3	2		2	1	15	38	17.5	11.2
Leon	1	1	2	3	1	2		2	1	3				16	10.5	9.5
Levy															0.0	0.0
Liberty									1					1	23.2	0.0
Madison					2									2	13.2	0.0
Manatee		1	1	2	2	1	1			4	1	2	9	24	15.4	5.8
Marion				1		2							2	5	3.8	3.2
Martin		1	1				2	1	1	1	2	2		11	16.1	7.2
Monroe	2	1	2	3	1	3	2	1	2	3	5	2	1	28	43.5	24.6
Nassau															0.0	1.0
Okaloosa	2		3			3	2	4	1	3	3			21	18.5	3.6
Okeechobee												1		1	4.7	3.3
Orange	16	23	9	9	14	12	12	12	11	10	13	8	9	158	32.6	21.7
Osceola		1		1		1	1	1	2					7	12.3	8.1
Palm Beach	5	7	7	5	11	8	7	8	10	15	7	4	6	100	16.0	12.6
Pasco	1	2	1	2	2		1	4	2	2	2	5		24	11.6	9.5
Pinellas	5	3	8	7	8	6	8	7	15	9	5	19	3	103	13.8	14.1
Polk	3	4	2	2		4	4	2	4	3	8	4	13	53	15.9	8.0
Putnam				1	1									2	3.9	7.6
St. Johns				1		1						1		3	5.5	15.9
St. Lucie	1	3	1		2		1		4	3				15	15.5	6.0
Santa Rosa			2			2	4							8	13.9	6.2
Sarasota	3		3		7	5			3		1			22	10.4	11.0
Seminole	2	3	4	3	3	3	2	2	3	4	2	1	4	36	19.1	9.6
Sumter						1								1	4.0	4.4
Suwanee		1							1					2	8.5	1.5
Taylor													1	1	5.9	0.0
Union			1											1	9.6	82.0
Volusia	8	3	7	2	5	8	4		7	5	9	6	18	82	30.3	19.2
Wakulla								1						1	9.1	16.1
Walton															0.0	4.9
Washington										1				1	6.7	2.2
STATE TOTAL	96	100	104	92	123	108	103	92	125	117	103	96	253	1512	14.8	11.2

*1978-1980 Average rate

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



HEPATITIS B - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

HEPATITIS NON-A, NON-B

Recent advances in serodiagnostic procedures in the viral hepatitides have led to the recognition of other prevalent causes of hepatitis besides hepatitis A and Hepatitis B viruses. Hepatitis non-A, non-B (NANB) is appropriately diagnosed by exclusion. It is suspected that NANB agent(s) circulate(s) in the blood of acute cases and chronic carriers. While there is clinical and epidemiologic evidence for two or more disease entities, methods for their serologic identification have not been developed. In 1981, two reporting categories of NANB hepatitis were created in Florida, NANB associated with blood/blood products, and NANB not associated with blood/blood products.

In 1981, 74 cases of NANB associated with blood/blood products were reported. Thirty-eight (51.4%) of the cases occurred in persons 60 years of age or older. Two distinct incubation periods appear to be associated with NANB hepatitis following transfusion, a short one of 4-30 days, and a long one of 3-4 months. NANB hepatitis associated with blood/blood products probably accounts for almost all post transfusion hepatitis in Florida and the United States, since HBsAg containing blood has been excluded for transfusions.

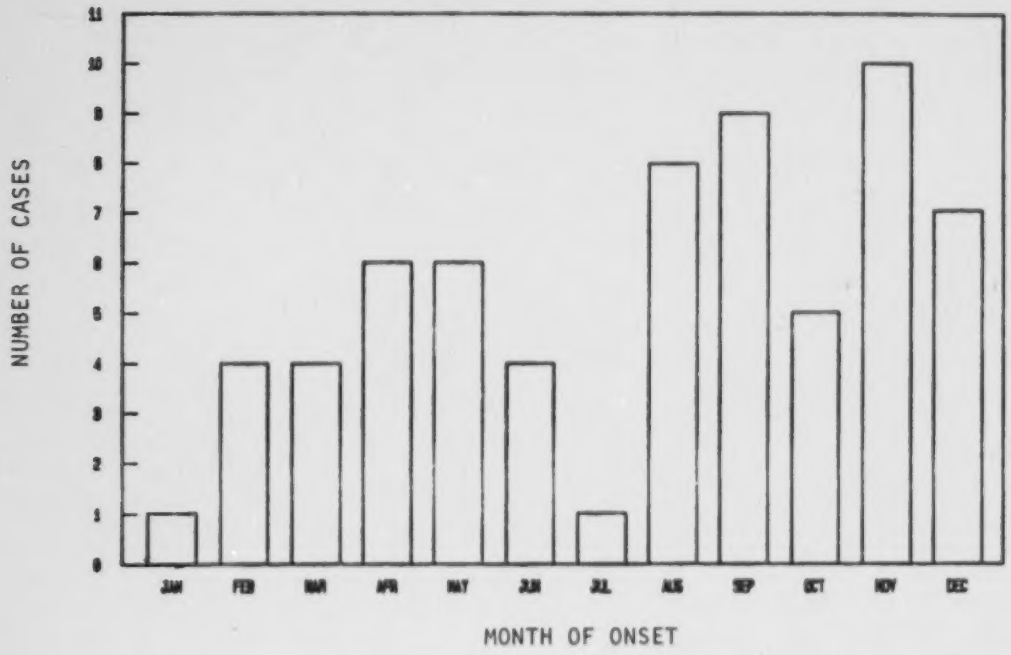
Cases of NANB hepatitis have occurred in persons with no apparent history of receipt of blood products or overt percutaneous exposure. Transmission has been reported among families, between sexual partners, and between prisoners. In Florida in 1981, 105 cases of NANB not associated with blood/blood products were reported. The greatest number of cases (43) occurred in the 20-29 year age group.

HEPATITIS NANB ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

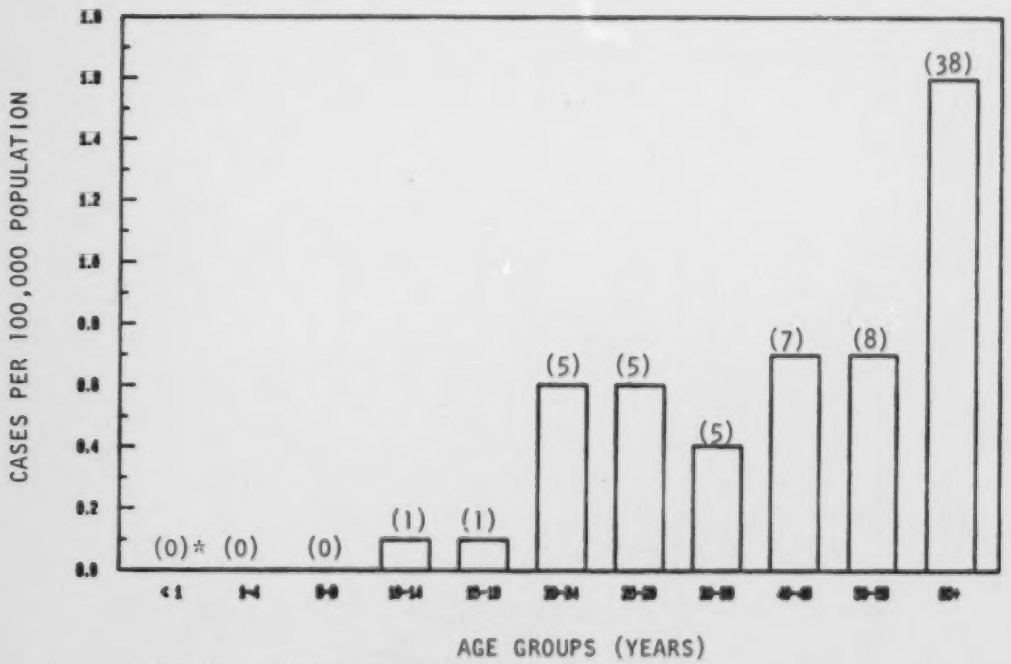
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua															0.0	--
Baker															0.0	--
Bay															0.0	--
Bradford															0.0	--
Brevard													1	1	0.4	--
Broward										1	2			3	0.3	--
Calhoun															0.0	--
Charlotte															0.0	--
Citrus															0.0	--
Clay				1										1	1.4	--
Collier						1		2			2			5	5.4	--
Columbia															0.0	--
Dade			1		1				1	2	1	1	3	10	0.6	--
DeSoto															0.0	--
Dixie															0.0	--
Duval					1								1	2	0.3	--
Escambia				1	1	1			1					4	1.7	--
Flagler															0.0	--
Franklin															0.0	--
Gadsden															0.0	--
Gilchrist															0.0	--
Glades															0.0	--
Gulf															0.0	--
Hamilton															0.0	--
Hardee															0.0	--
Hendry															0.0	--
Hernando															0.0	--
Highlands															0.0	--
Hillsborough													1	1	0.2	--
Holmes															0.0	--
Indian River															0.0	--
Jackson															0.0	--
Jefferson															0.0	--
Lafayette															0.0	--
Lake															0.0	--
Lee		1												1	0.5	--
Leon												1		1	0.7	--
Levy															0.0	--
Liberty															0.0	--
Madison															0.0	--
Manatee															0.0	--
Marion															0.0	--
Martin					2									2	2.9	--
Monroe		1	1	1										3	4.7	--
Nassau					1									1	2.9	--
Okaloosa															0.0	--
Okeechobee															0.0	--
Orange	1							1	3					5	1.0	--
Osceola															0.0	--
Palm Beach		1	1	1			1				1	1	1	7	1.1	--
Pasco				1										1	0.5	--
Pinellas			1	1		2		3	2	2	2	3	1	17	2.3	--
Polk								1	2					3	0.9	--
Putnam															0.0	--
St. Johns															0.0	--
St. Lucie															0.0	--
Santa Rosa															0.0	--
Sarasota								1						1	0.5	--
Seminole															0.0	--
Sumter															0.0	--
Suwanee															0.0	--
Taylor															0.0	--
Union															0.0	--
Volusia		1									2	1	1	5	1.8	--
Wakulla															0.0	--
Walton															0.0	--
Washington															0.0	--
STATE TOTAL	1	4	4	6	6	4	1	8	9	5	10	7	9	74	0.7	--

*Not reported as a separate type of hepatitis in 1978.

HEPATITIS NANB ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



HEPATITIS NANB ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



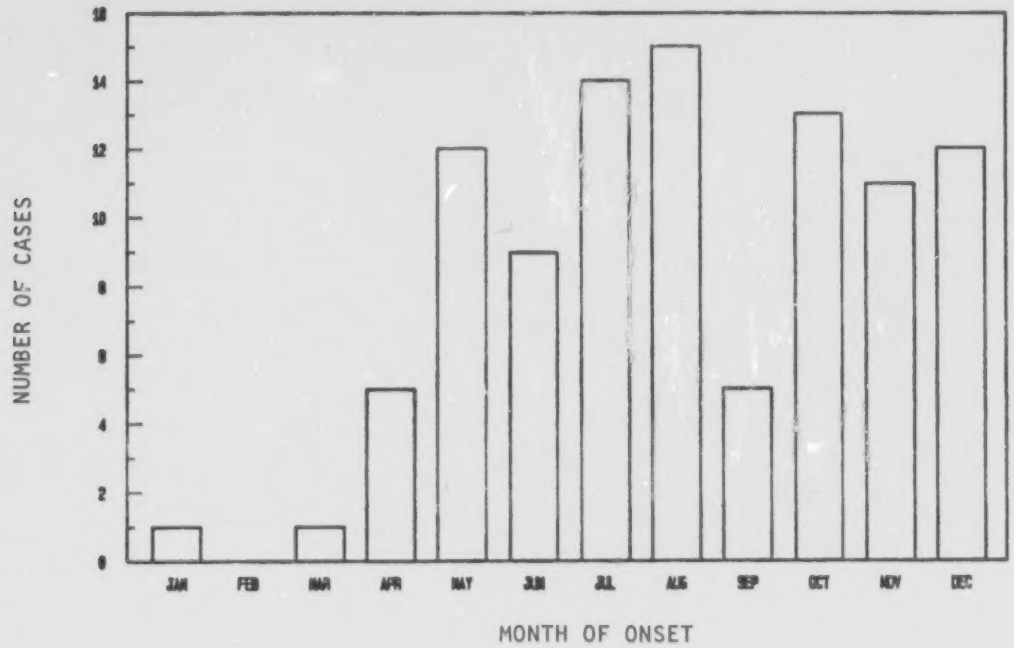
*( ) Reported number of cases

HEPATITIS NANB NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION BY COUNTY, FLORIDA, 1981

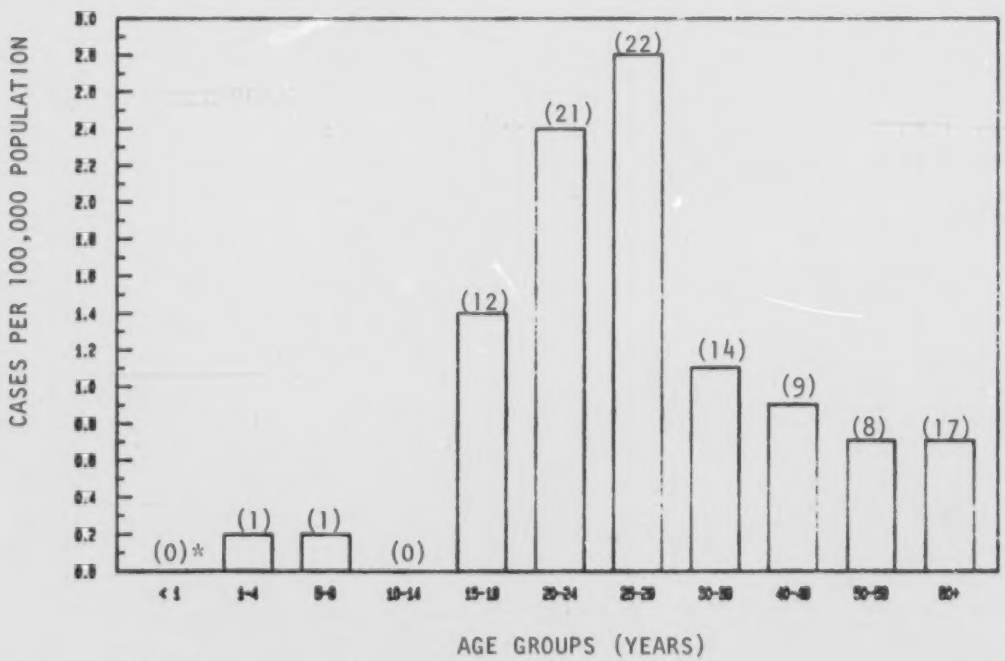
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua															0.0	--
Baker															0.0	--
Bay															0.0	--
Bradford															0.0	--
Brevard						1								1	6.7	--
Broward				2	3	1	3	4	2	1		1	2	19	1.8	--
Calhoun															0.0	--
Charlotte															0.0	--
Citrus															0.0	--
Clay															0.0	--
Collier															0.0	--
Columbia															0.0	--
Dade			1	2	1		1			1		2	2	10	0.6	--
DeSoto															0.0	--
Dixie															0.0	--
Duval					1							1		2	0.3	
Escambia															0.0	--
Flagler															0.0	--
Franklin															0.0	--
Gadsden															0.0	--
Gilchrist															0.0	--
Glades															0.0	--
Gulf															0.0	--
Hamilton															0.0	--
Hardee															0.0	--
Hendry															0.0	--
Hernando															0.0	--
Highlands															0.0	--
Hillsborough					1	1					1			3	0.5	--
Holmes															0.0	--
Indian River															0.0	--
Jackson															0.0	--
Jefferson															0.0	--
Lafayette															0.0	--
Lake															0.0	--
Lee													1	1	0.5	--
Leon										2	1			3	2.0	--
Levy															0.0	--
Liberty															0.0	--
Madison															0.0	--
Manatee															0.0	--
Marion							1		1	1	2	3	1	9	6.9	--
Martin															0.0	--
Monroe						1	2				1			4	6.2	--
Nassau															0.0	--
Okaloosa															0.0	--
Okeechobee															0.0	--
Orange				1	2	4	2	6	1					16	3.3	--
Osceola									1					1	1.8	--
Palm Beach	1				1		4	4		3	3	2		18	2.9	--
Pasco					1		1	1		1				4	1.9	--
Pinellas					1					2	2	2		7	0.9	--
Polk						1								1	0.3	--
Putnam															0.0	--
St. Johns															0.0	--
St. Lucie					1									1	1.0	--
Santa Rosa															0.0	--
Sarasota															0.0	--
Seminole															0.0	--
Sumter															0.0	--
Suwanee															0.0	--
Taylor															0.0	--
Union															0.0	--
Volusia										2	1	1	1	5	1.8	--
Wakulla															0.0	--
Walton															0.0	--
Washington															0.0	--
STATE TOTAL	1		1	5	12	9	14	15	5	13	11	12	7	105	1.0	--

*Not reported as a separate type of hepatitis in 1978.

HEPATITIS NANB NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES
BY MONTH OF ONSET, FLORIDA, 1981



HEPATITIS NANB NOT ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASE
RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

HEPATITIS UNSPECIFIED

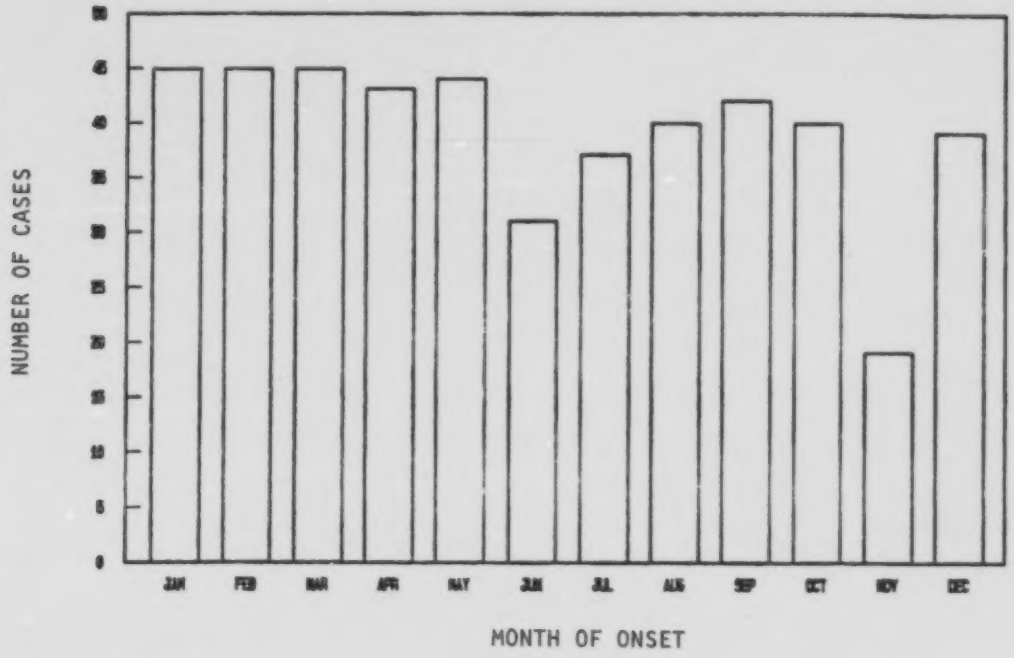
Hepatitis cases reported without a specific diagnosis were classified as a separate category beginning in 1978. In 1981, 530 cases were reported -- a decrease of 32.7% from 1980 (788 cases). There was a 35.0% decrease in the rate per 100,000 population, from 8.0 in 1980 to 5.2 in 1981. The similarity of age distribution between hepatitis A and hepatitis unspecified suggests that had a diagnosis been established, many of the unspecified cases would have been shown to be cases of hepatitis A. The decline in cases of hepatitis unspecified may reflect the greater availability of diagnostic testing for hepatitis A and the improvement of hepatitis A control measures. There were 29 deaths attributed to hepatitis unspecified in 1981.

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

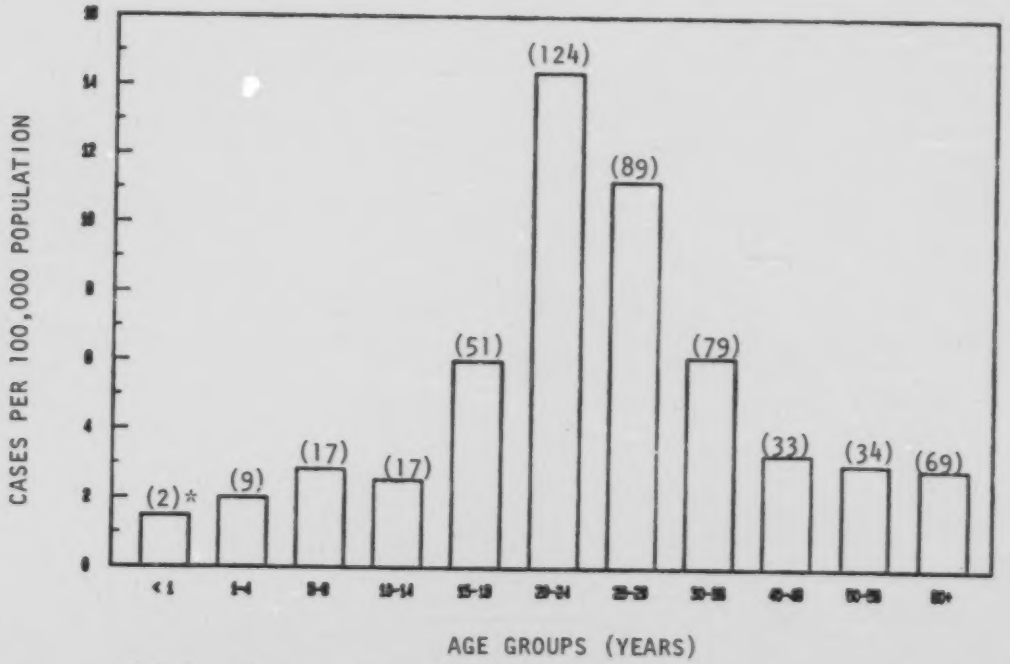
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua															0.0	10.5
Baker															0.0	4.6
Bay							1	1			1		1	4	4.0	4.8
Bradford						1								1	5.0	7.0
Brevard	1						2		2			1		6	2.1	2.6
Broward	5	10	6	4	10	4	8	6	12	7	1	3	11	87	8.2	6.6
Calhoun					1									1	10.6	3.7
Charlotte			1				1	1						3	4.8	4.2
Citrus															0.0	7.5
Clay								2		1		1		4	5.7	7.0
Collier			1		1		2					1		5	5.4	23.7
Columbia															0.0	3.0
Dade	8	1	4	11	5	2	3	3	5	4	2	5	18	71	4.1	6.3
DeSoto															0.0	3.5
Dixie													1	1	12.1	13.0
Duval	2	5	5	1	1		1			5	1		1	22	3.8	4.6
Escambia												1		1	0.4	0.1
Flagler									1					1	8.0	3.4
Franklin															0.0	0.0
Gadsden															0.0	0.8
Gilchrist															0.0	5.8
Glades												1		1	16.2	0.0
Gulf															0.0	0.0
Hamilton															0.0	7.6
Hardee															0.0	15.8
Hendry															0.0	3.7
Hernando															0.0	0.0
Highlands															0.0	1.4
Hillsborough	1	1	3			3	1				1	3		13	2.0	7.2
Holmes															0.0	0.0
Indian River			1		1			2	1				3	8	12.5	9.9
Jackson					2									2	5.0	7.7
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake	1		1	1		2	3	3	1		1			13	11.9	9.3
Lee	2	1	5	1		2	1	3	1	2	2	1	10	31	14.3	10.9
Leon	2	1	1	3	2	3				1		1		14	9.2	16.1
Levy															0.0	3.5
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee	1			2		1						2		6	3.9	3.0
Marion			1							1			3	5	3.8	4.4
Martin												1		1	1.5	2.8
Monroe												1		1	1.6	37.1
Nassau										1				1	2.9	6.2
Okaloosa															0.0	3.6
Okeechobee							1	2						3	14.0	0.0
Orange	8	11	4	4	3	1	3	4	4	4	5	2		53	10.9	20.5
Osceola							1	1	1	1	1		2	7	12.3	0.7
Palm Beach	3	3	2	3	1	1	3	1	2	1	1	3		24	3.8	4.1
Pasco							1	1		1				3	1.4	6.3
Pinellas	2	4	1	1	6	6	1	2	5	3	1	4	2	38	5.1	1.6
Polk	3	1	2	3	5	2	4	3	1	4		3	5	36	10.8	24.8
Putnam															0.0	2.1
St. Johns												1		1	1.8	1.4
St. Lucie	1	1						2	1	1				6	6.2	5.6
Santa Rosa			1											1	1.7	0.6
Sarasota		3		1	2			1						7	3.3	3.8
Seminole	2	2	4	6	2	3		1	3		1	1	1	26	13.8	16.7
Sumter	1													1	4.0	5.9
Suwanee									1					1	4.2	3.1
Taylor															0.0	62.5
Union			2	2										4	38.3	28.4
Volusia	2	1			2			1	1	3	1	3	2	16	5.9	9.4
Wakulla															0.0	3.2
Walton															0.0	1.6
Washington															0.0	0.0
STATE TOTAL	45	45	45	43	44	31	37	40	42	40	19	39	60	530	5.2	7.5

*1978-1980 Average rate

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



HEPATITIS UNSPECIFIED - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

MEASLES

In 1981, there were 345 cases of measles reported, a 20% decrease from 1980, when 432 cases of measles were reported. The 432 cases reported in 1980 represented a 47% decrease from the 3-year 1977-79 mean of 816 cases per year. The decrease in the number of cases reported in 1981 continued to reverse the slight upturn in measles morbidity seen in 1978 and 1979. The overall State case rate per 100,000 population in 1981 was 3.4 which was a 23% decrease from 1980 (4.4) and an 8% decrease from the 3-year 1978-80 mean (4.8); the national case rate in 1981 was 1.4.

Measles cases were reported in 25 (37%) of Florida's 67 counties compared to 38 (57%) of Florida's 67 counties in 1980. Pasco (105 cases), Lee (88 cases), Pinellas (50 cases), and Broward (32 cases) counties accounted for 79.7% of the State's cases and had a combined case rate of 12.4 per 100,000 population compared to the overall State rate of 3.4. Pasco county reported 105 cases (school-based outbreak) and had the highest case rate in the state (50.6). Significant numbers of cases were also reported from Dade (14 cases, 0.8 rate), Hillsborough (13 cases, 2.0 rate), and Manatee (8 cases, 3.9 rate) counties.

An outbreak of measles occurred in public schools in Lee county during July through November of 1981. A day care center related outbreak (25 cases) occurred in Broward County. Three cases were hospital associated, including one nurse. Pasco and Pinellas also had large outbreaks.

Measles cases tended to occur in the late winter with a peak of 65 cases in March. Fifty-eight percent (201 cases) occurred during the first six months of the year (Figure 2). Males and females appeared at equal risk of measles (170 male, 175 female cases). In 1981, the highest age-specific incidence rate per 100,000 population was, as in 1979 and 1980, in the 1-4 year old age group (80 cases, 18.0 rate). The 5-9 year old age group (89 cases, 14.4 rate) and the 10-14 year old age group (82 cases, 12.0 rate) also contributed a significant number of cases. These data show that preschool and school age children still provide enough susceptibles to sustain measles virus transmission. Efforts at immunizing infants and children enrolled in day care centers remained a top priority of the State's immunization program.

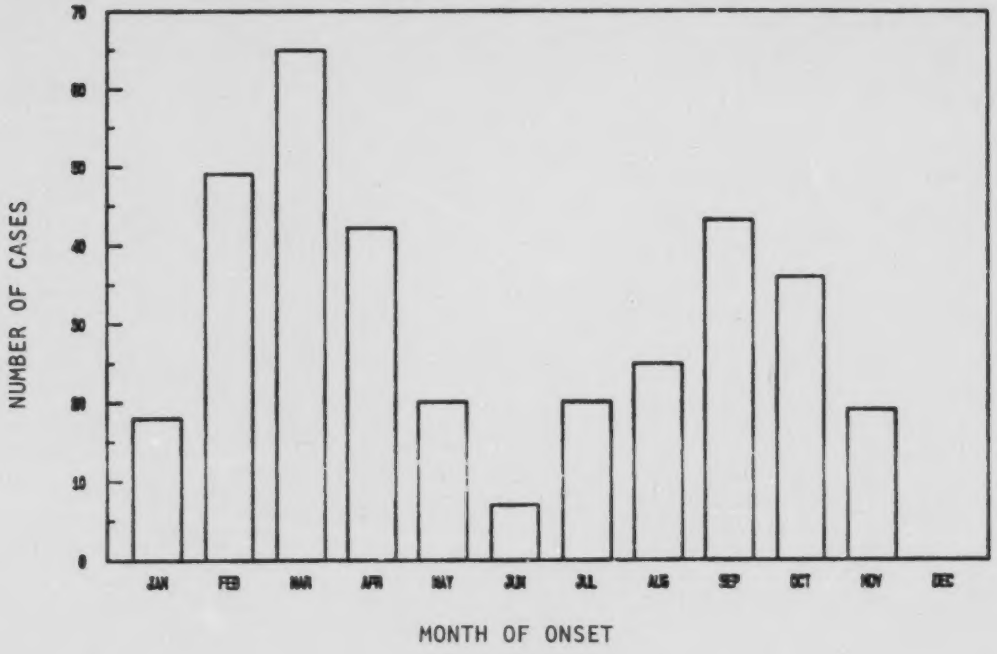
Cases by race show that in the 1-4 year old age group 25% (20 of 80 cases) occurred in blacks, whereas blacks represent only 13% of the State's population. These data are an improvement over 1979 when almost 50% of the cases in the 1-4 year old age group were in black children and almost the same as 1980 when 29% (30 of 104) occurred in this group. Increased efforts are needed to deliver immunization service to infants and young children in minority groups and not wait until school entry to begin immunizations.

MEASLES - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

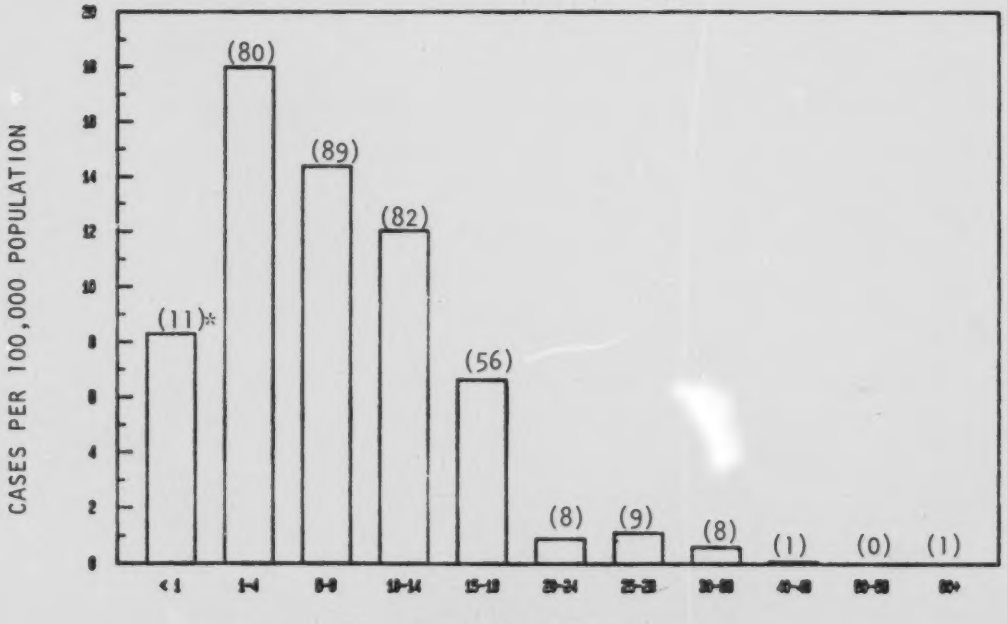
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua				1										1	0.6	1.6
Baker															0.0	34.4
Bay															0.0	0.3
Bradford			1											1	5.0	0.0
Brevard		1			1		1							3	1.1	4.3
Broward			2		2			2	1	12	12		1	32	3.0	14.1
Calhoun															0.0	11.0
Charlotte															0.0	1.2
Citrus															0.0	36.2
Clay															0.0	4.3
Collier															0.0	7.3
Columbia															0.0	2.0
Dade	3	2	4	1	1	1		2						14	0.8	6.2
DeSoto															0.0	7.0
Dixie															0.0	4.3
Duval							2		1					3	0.5	2.3
Escambia	2													2	0.8	22.9
Flagler															0.0	0.0
Franklin															0.0	0.0
Gadsden															0.0	7.5
Gilchrist															0.0	5.8
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee															0.0	10.5
Hendry				1										1	5.1	20.4
Hernando															0.0	29.0
Highlands															0.0	12.7
Hillsborough		1		8	2	1		1						13	2.0	9.3
Holmes															0.0	48.6
Indian River															0.0	59.4
Jackson															0.0	4.3
Jefferson															0.0	3.2
Lafayette															0.0	0.0
Lake															0.0	29.6
Lee							9	14	39	20	6			88	40.5	1.5
Leon						1								1	0.7	13.5
Levy															0.0	14.1
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee		1		3	1					1				6	3.9	16.7
Marion						1		1		1				3	2.3	1.5
Martin															0.0	2.8
Monroe															0.0	0.5
Nassau							1							1	2.9	2.1
Okaloosa															0.0	0.0
Okeechobee															0.0	0.0
Orange							3	2						5	1.0	4.5
Osceola															0.0	4.4
Palm Beach	1													1	0.2	27.3
Pasco	10	33	46	11	2					2	1			105	50.6	19.2
Pinellas	1	9	10	16	10	2	1		1					50	6.7	3.7
Polk			1				1	1	1					4	1.2	3.7
Putnam							1							1	1.9	3.4
St. Johns															0.0	1.4
St. Lucie		1												1	1.0	3.6
Santa Rosa						1								1	1.7	8.7
Sarasota															0.0	1.0
Seminole		1			1		1	1						4	2.1	2.6
Sumter															0.0	8.8
Suwanee															0.0	3.1
Taylor															0.0	0.0
Union								1						1	9.6	0.0
Volusia	1		1	1										3	1.1	11.0
Wakulla															0.0	0.0
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	18	49	65	42	20	7	20	25	43	36	19	0	1	345	3.4	9.1

*1978-1980 Average rate

MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981

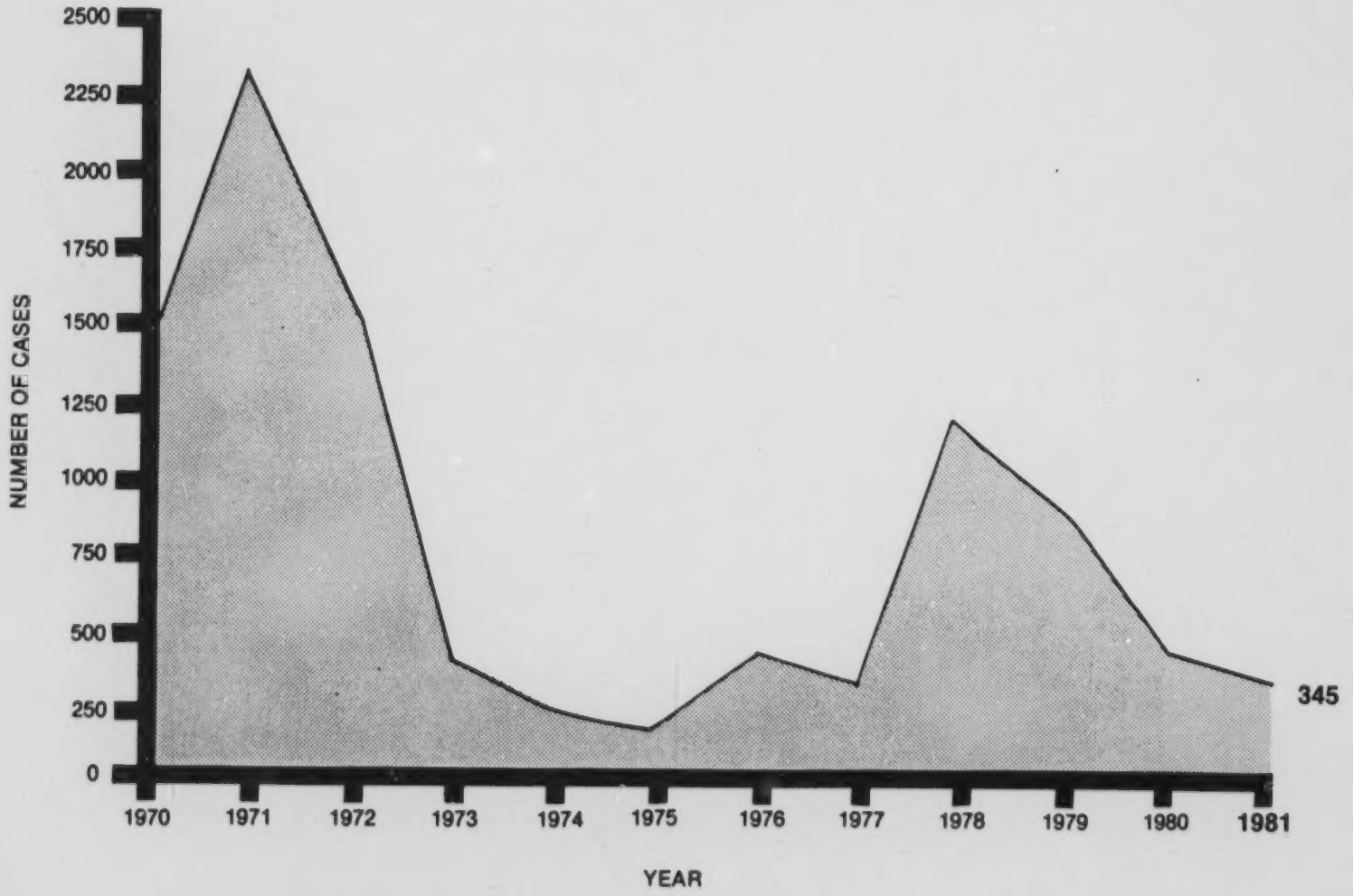


MEASLES (RUBEOLA) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

MEASLES (Rubeola) · Reported Cases, Florida, 1970-1981



MENINGITIS, ASEPTIC

In 1981, there were 673 cases of aseptic meningitis reported in Florida, a 2.9% increase from 1980 when 654 cases were reported. This represents a dramatic decrease in the rate of increase over the preceeding two year report period 1979 to 1980 when there was a 105% increase. The overall state case rate per 100,000 population did not change significantly from last year, 6.6/100,000 in 1981 vs 6.7/100,000 in 1980. The state case rate was 47% higher than the national rate of 4.5 cases per 100,000 population.

Aseptic meningitis cases were reported from 36 (54%) of Florida's 67 counties. The major population centers in the state accounted for most of the cases. Enteroviruses, which probably accounted for the majority of cases, are identified in most areas of the state. Enterovirus transmission occurs most frequently during late spring, summer, and fall which coincides with the peak incidence of aseptic meningitis cases during the months May through September.

The highest age specific incidence rate per 100,000 population was in the less than 1-year-old age group (115 cases, 86.8/100,000). The case rate then decreased rapidly with increasing age. The slightly elevated case rate in the age groups 1-4 through 25-29 may represent familial and parental associations with infants and young children.

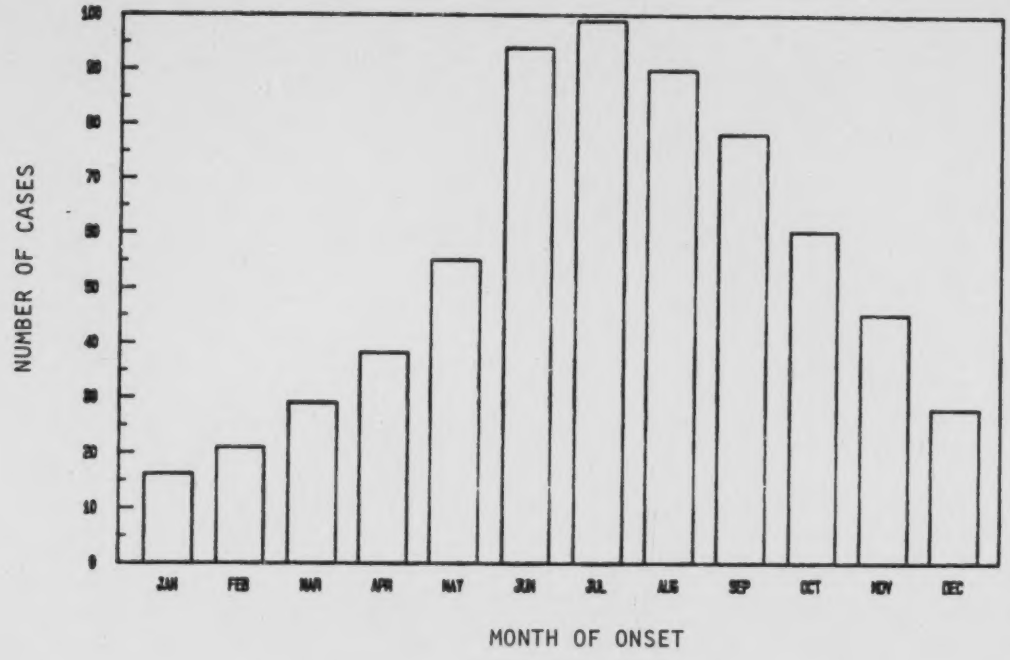
Of the reported cases, 380 (56%) were male and 292 (44%) female. Whites accounted for 543 (81%) of the cases, Blacks 109 (16%), all other races combined 7 (1%), and 14 (2%) reported cases did not have race indicated.

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

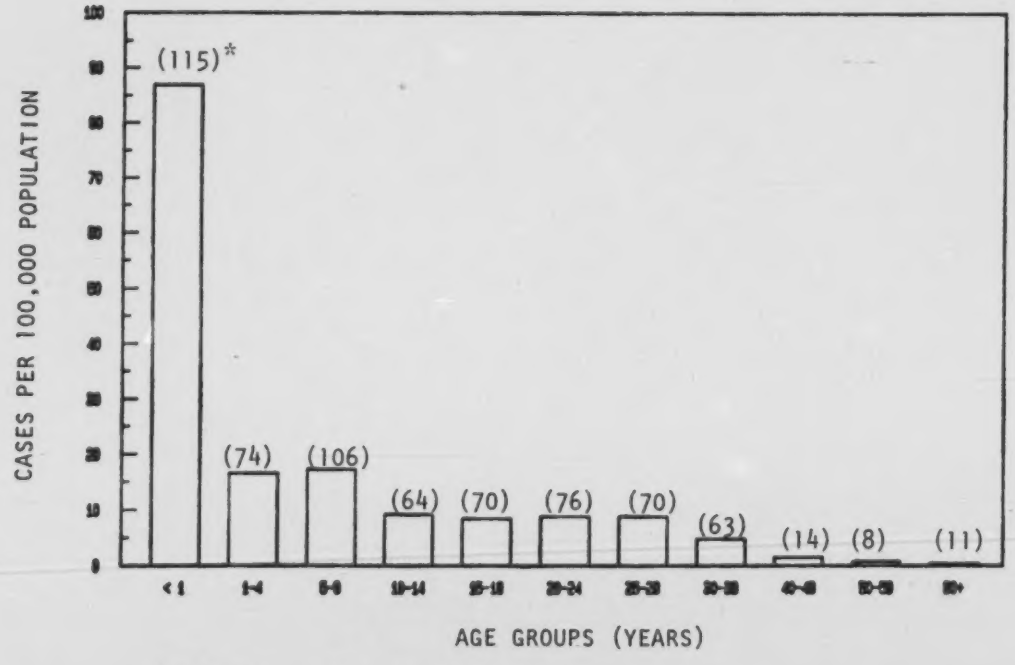
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua	1	1			2	1	2		1	1	4			13	8.4	4.1
Baker							1							1	6.3	2.3
Bay							3							3	3.0	0.7
Bradford															0.0	1.8
Brevard			1	3	2	6	3	8	1	6		4		34	12.0	3.6
Broward	2	1	2	2	4	5	9	3	4	3		2	1	38	3.6	1.7
Calhoun															0.0	0.0
Charlotte															0.0	1.8
Citrus						1		1					1	3	5.0	1.4
Clay		1				2				1	1	1		6	8.5	4.3
Collier			1											1	1.1	4.1
Columbia															0.0	2.0
Dade	2	1	9	4	2	4	18	15	12	2	3		6	78	4.5	4.3
DeSoto															0.0	3.5
Dixie															0.0	0.0
Duval	2	4	1		5	11	9	17	25	16	6	2	2	100	17.3	9.8
Escambia							2		1					3	1.2	3.1
Flagler															0.0	0.0
Franklin															0.0	0.0
Gadsden															0.0	0.0
Gilchrist					1									1	15.5	0.0
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee															0.0	7.0
Hendry															0.0	0.0
Hernando							1							1	2.0	0.8
Highlands															0.0	0.7
Hillsborough				2	6	6	18	8	1	9	7	2		59	8.9	7.0
Holmes															0.0	0.0
Indian River						4	2	1					4	11	17.2	8.7
Jackson															0.0	0.9
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake						1		1	1	1	1			5	4.6	6.7
Lee	4	2	1		3	3		2	4		2		2	23	10.6	4.6
Leon				1		1			5	1		1		9	5.9	4.7
Levy															0.0	1.8
Liberty															0.0	7.8
Madison															0.0	0.0
Manatee									1				1	2	1.3	2.3
Marion							2		2				1	5	3.8	0.9
Martin			2	2		2	3	1		1				11	16.1	3.3
Monroe											1			1	1.6	1.6
Nassau								1						1	2.9	11.3
Okaloosa															0.0	0.9
Okeechobee										1				1	4.7	3.3
Orange	1		3	4	2	5	4	5	4	2	3	2	1	36	7.4	7.4
Osceola								1			1			2	3.5	13.3
Palm Beach		6	4	14	19	31	18	9	7	5	5	5		123	19.7	5.8
Pasco										1				1	0.5	1.9
Pinellas		4	1	3	2	3	1	1	5	1		3	1	25	3.3	3.4
Polk			4		7	2	2	5	2	3	5	2		32	9.6	13.0
Putnam															0.0	4.8
St. Johns	1					2						1		4	7.4	2.8
St. Lucie						2		1		1	1			5	5.2	0.0
Santa Rosa											2			2	3.5	1.9
Sarasota								1			1			2	0.9	3.1
Seminole	1	1		3		1	1	6	2	2	2	1		20	10.6	5.8
Sumter															0.0	0.0
Suwanee															0.0	1.5
Taylor															0.0	0.0
Union															0.0	3.2
Volusia	2					1		3		3		2		11	4.1	2.6
Wakulla															0.0	6.5
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	16	21	29	38	55	94	99	90	78	60	45	28	20	673	6.6	4.5

*1978-1980 Average rate

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



MENINGITIS, ASEPTIC - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Number of cases reported

MENINGITIS, MENINGOCOCCAL

In 1981, 256 cases of meningococcal meningitis were reported. This was an incidence rate of 2.5 cases per 100,000 population which was a slight increase above the 2.2 cases per 100,000 population reported in 1980. The peak age-specific incidence of reported cases occurred in the <1 year olds (25.7 per 100,000) followed closely by the 1-4 year olds (19.8 per 100,000). These two age groups represented 48% of the total cases reported. The incidence rate in age groups 5-9 and above remained fairly constant.

Of the 256 reported cases, 132 (52%) were male; 209 (82%) were in whites, 28 (11%) blacks, 3 (1%) other Asian, 2 (0.8%) other non-white, 1 (0.4%) American Indian, and in the remaining 13 (5%) the race was not specified.

Meningococcal meningitis cases were reported from 41 (61%) of Florida's 67 counties. There was no definable geographic clustering of cases within Florida; however, Dade County with an incidence rate of 3.7 per 100,000 persons had the greatest number of cases, 64 (25% of the state total). Dade County had an outbreak the first 3 months of 1981 which accounted for 34 (53%) of its reported 64 cases. The majority of cases occurred in Hispanic females over 19 years of age. The meningococcal organism isolated most frequently in this outbreak was a sulfa-resistant subtype of serogroup B, which is unusual in the United States.

Serogrouping of meningococcal isolates provided a valuable epidemiologic marker that was very helpful in distinguishing a cluster of related cases from sporadic cases that are only temporally related. For the 256 reported cases, serogrouping and sulfathiazole-sensitivity was done in 167 (65%) of the isolates(table).

According to data provided by HRS Public Health Statistics Section, there were a total of 39 deaths due to meningococcal infections. Of these 39 deaths 16 (41%) were due to meningoccal meningitis, 16 (41%) were due to meningococcemia, and 7 (18%) due to Waterhouse-Friedrichsen Syndrome.

MENINGOCOCCAL, MENINGITIS 1981

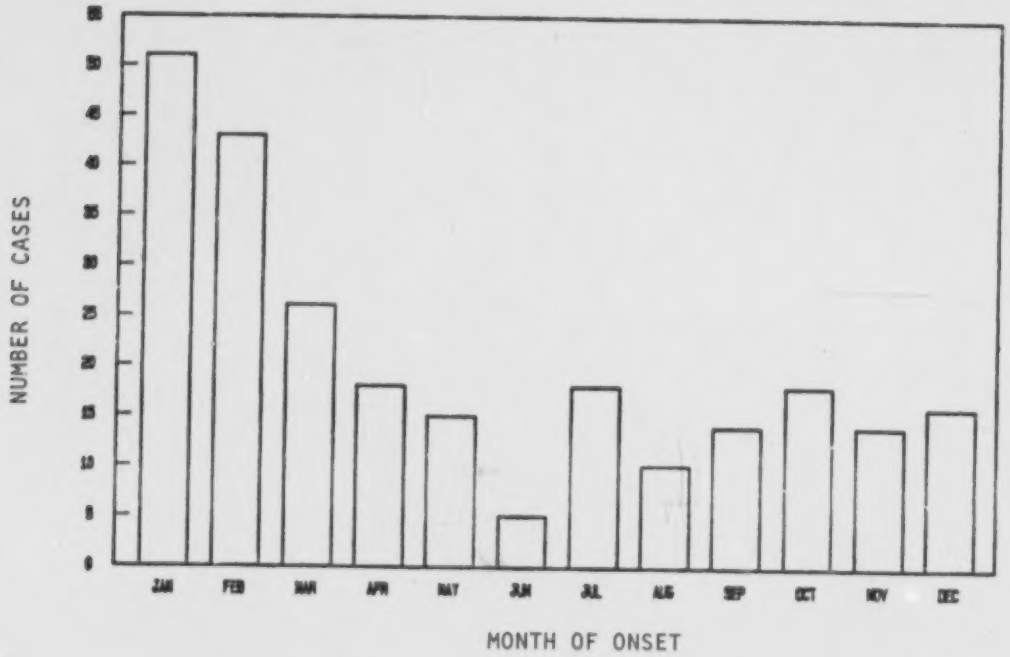
Serogrouping		Sulfa Sensitivity Testing			
Group	Number	Sensitive	Resistant	Int	Not Tested
A	1	1 (100%)	0	0	0
B	95	31 (33%)	48 (51%)	9 (9%)	7 (7%)
C	37	10 (27%)	16 (43%)	0	11 (30%)
D	0	0	0	0	0
Y	4	2 (50%)	2 (50%)	0	0
Z	2	1 (50%)	1 (50%)	0	0
W-135	6	3 (50%)	0	1 (17%)	2 (33%)
Ungroupable	17	5 (29%)	7 (41%)	3 (18%)	2 (12%)
Unk	5	1 (20%)	1 (20%)	0	3 (60%)
Total	167	54 (32%)	75 (45%)	13 (8%)	25 (15%)

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

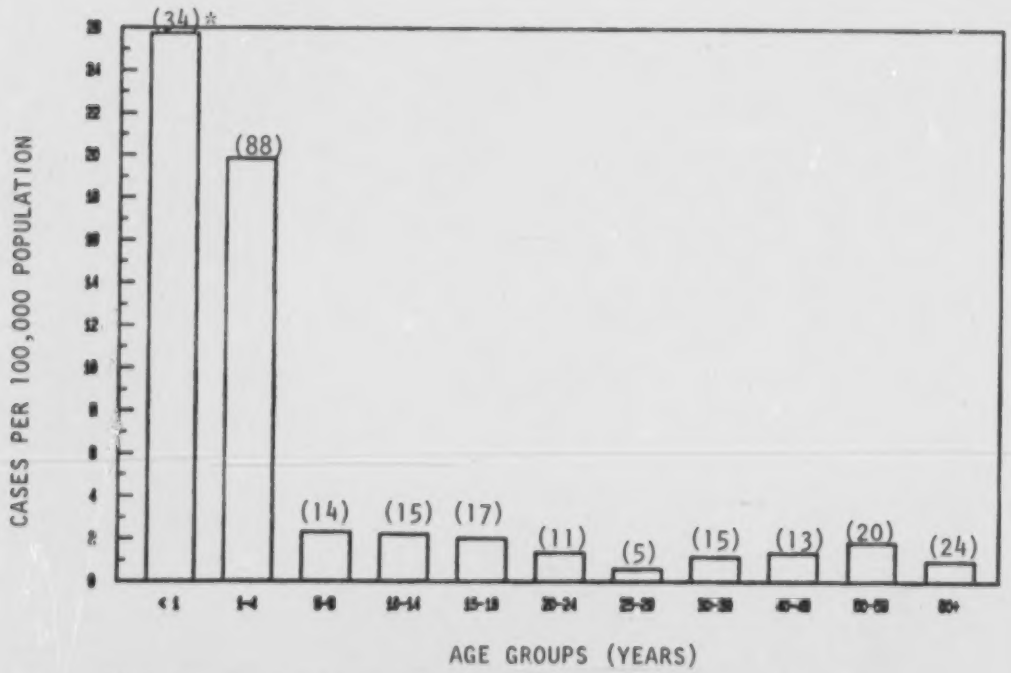
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua				3										3	1.9	2.7
Baker							1							1	6.3	2.3
Bay															0.0	3.4
Bradford			1											1	5.0	0.0
Brevard	1						2							3	1.1	1.9
Broward	2	2	2	1	2	2				1				12	1.1	1.0
Calhoun															0.0	3.7
Charlotte															0.0	0.0
Citrus	1		1											2	3.3	2.0
Clay											1			1	1.4	2.2
Collier	2	1									1			4	4.3	4.5
Columbia											1			1	2.8	2.0
Dade	20	12	5	5	2		2	2	6	5	3	2		64	3.7	2.9
DeSoto								1						1	5.1	0.0
Dixie															0.0	0.0
Duval		1	2		2		1			1		1		8	1.4	2.7
Escambia	1	3									1			5	2.1	3.3
Flagler															0.0	3.4
Franklin															0.0	0.0
Gadsden	2		1											3	7.1	3.3
Gilchrist		1												1	15.5	5.8
Glades															0.0	0.0
Gulf	1													1	9.4	3.1
Hamilton															0.0	3.8
Hardee															0.0	1.8
Hendry															0.0	1.9
Hernando							1					2		3	6.0	0.8
Highlands		1			1		1							3	6.0	0.0
Hillsborough	1	4	3	2	1	1	1	2	3		1	3		22	3.3	2.5
Holmes															0.0	0.0
Indian River			1	1								1		3	4.7	2.9
Jackson							1							1	2.5	0.9
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake							1							1	0.9	0.7
Lee	2	1						1		1	1		3	9	4.1	4.3
Leon			1		1					1				3	2.0	2.3
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee	1			1	1		2				1	1	2	9	5.8	2.5
Marion											1	1	1	3	2.3	2.0
Martin	1													1	1.5	1.1
Monroe															0.0	1.1
Nassau							1							1	2.9	6.2
Okaloosa															0.0	0.3
Okeechobee	1		1											2	9.4	1.7
Orange		1	1	2	1		3		1	2		1		12	2.5	2.4
Osceola								2						2	3.5	2.2
Palm Beach	4	6	1	1	1			1	1	1		1		17	2.7	2.8
Pasco															0.0	1.1
Pinellas	1	2	1	1	1	1			1	1	3			12	1.6	1.8
Polk	1	1	1		1			1	2	2			2	11	3.3	2.4
Putnam		3	1											4	7.8	6.9
St. Johns	2	1				1				1				5	9.2	2.8
St. Lucie	1													1	1.0	2.0
Santa Rosa															0.0	0.6
Sarasota										1		1		2	0.9	3.4
Seminole	1											1		2	1.1	3.6
Sumter	4	1	2				1							8	32.0	2.9
Suwanee															0.0	0.0
Taylor															0.0	4.2
Union															0.0	0.0
Volusia	1	2	1	1	1					1		1		8	3.0	2.4
Wakulla															0.0	0.0
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	51	43	26	18	15	5	18	10	14	18	14	16	8	256	2.5	2.3

*1978-1980 Average rate

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



MENINGITIS, MENINGOCOCCAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



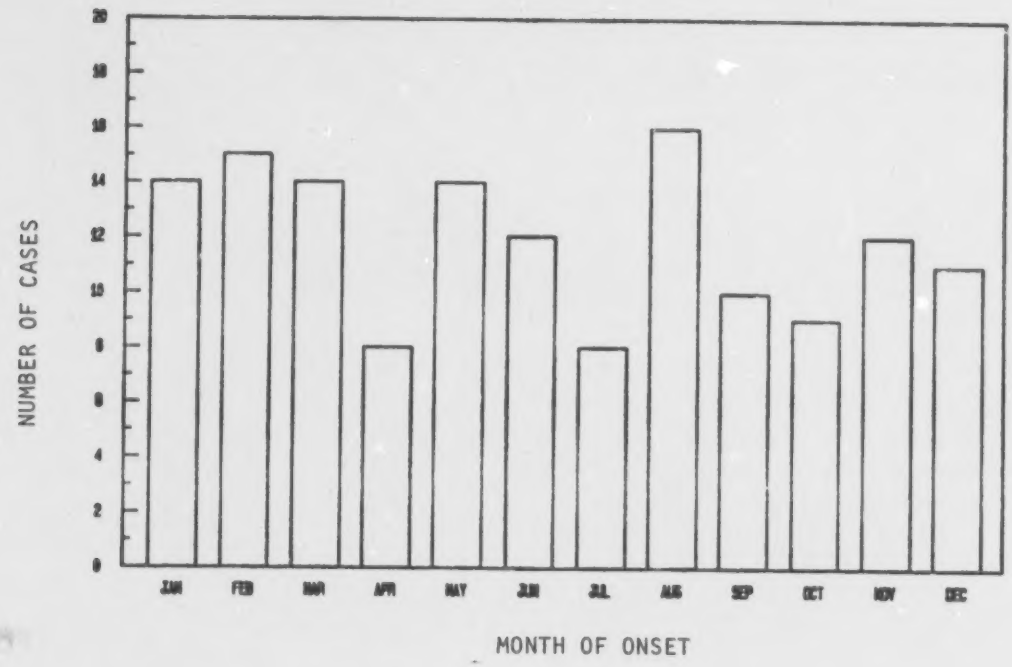
*( ) Reported number of cases

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

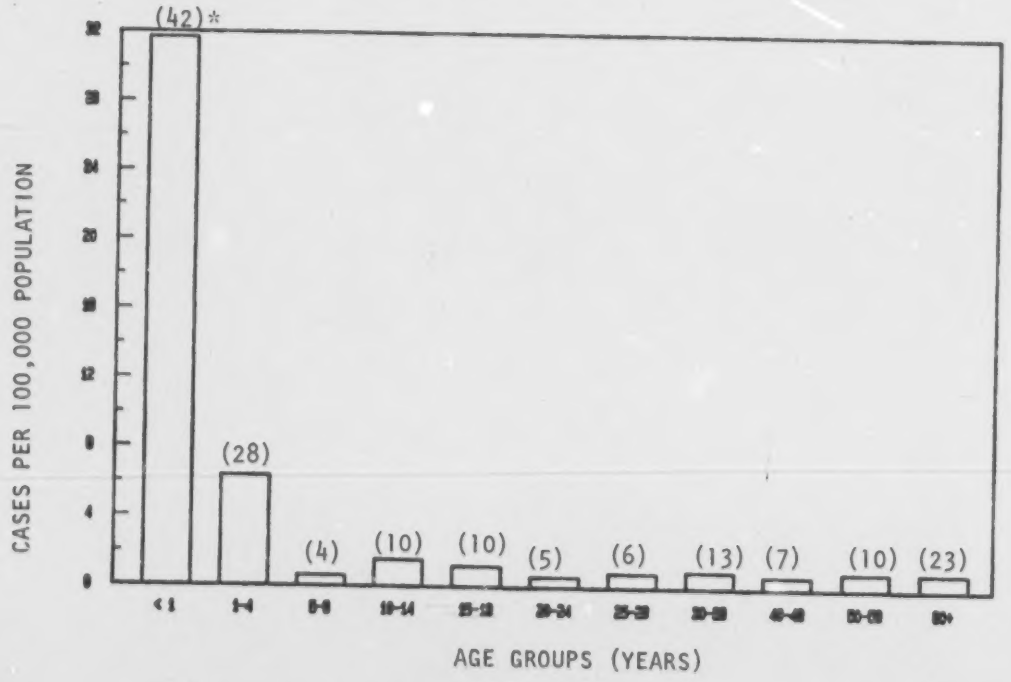
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua						1	1							2	13.4	--
Baker															0.0	--
Bay															0.0	--
Bradford															0.0	--
Brevard	1				1	1	1		1	1	1			7	2.5	--
Broward	1		1					1			1	1		5	0.5	--
Calhoun													1	1	10.6	--
Charlotte							1							1	1.6	--
Citrus								1		1				2	3.3	
Clay															0.0	--
Collier															0.0	--
Columbia															0.0	--
Dade	1			1		1		1			1		4	9	0.5	--
DeSoto															0.0	--
Dixie															0.0	--
Duval				1	1	1		5	4	2	1	1		16	2.8	--
Escambia				1	3			1			1			6	2.5	--
Flagler															0.0	--
Franklin															0.0	--
Gadsden															0.0	--
Gilchrist															0.0	--
Glades															0.0	--
Gulf															0.0	--
Hamilton															0.0	--
Hardee															0.0	--
Hendry			1											1	5.1	--
Hernando	1													1	2.0	--
Highlands															0.0	--
Hillsborough		1	1			2		1	4	1		2		12	1.8	--
Holmes															0.0	--
Indian River	2		1										2	5	7.8	--
Jackson															0.0	--
Jefferson															0.0	--
Lafayette															0.0	--
Lake	1									1				2	1.8	--
Lee	1	2	1	2	1			2			1	2	5	17	7.8	--
Leon															0.0	--
Levy															0.0	--
Liberty															0.0	--
Madison															0.0	--
Manatee															0.0	--
Marion													3	3	2.3	--
Martin												1		1	1.5	--
Monroe															0.0	--
Nassau															0.0	--
Okaloosa															0.0	--
Okeechobee						1								1	4.7	--
Orange	1		1	1	1		1	1		2	2			10	2.1	--
Osceola															0.0	--
Palm Beach	2		1	2	1	3		1			4		1	15	2.4	--
Pasco		1												1	0.5	--
Pinellas			2		3			1						6	0.8	--
Polk	1	6	1		2	1	2					1		14	4.2	--
Putnam															0.0	--
St. Johns		1										1		2	3.7	--
St. Lucie												1		1	1.0	--
Santa Rosa															0.0	--
Sarasota		4	1		1	1	1	1	1	1		1		12	5.7	--
Seminole	1		1				1							3	1.6	--
Sumter															0.0	--
Suwanee															0.0	--
Taylor															0.0	--
Union															0.0	--
Volusia	1		2											3	1.1	--
Wakulla															0.0	--
Walton															0.0	--
Washington															0.0	--
STATE TOTAL	14	15	14	8	14	12	8	16	10	9	12	11	16	159	1.6	--

*Not available

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



MENINGITIS, OTHER BACTERIAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

RUBELLA

In 1981 there were 67 cases of rubella reported in Florida, a 38.5% decrease from 1980 when 109 cases were reported and a 78.9% decrease from 1979 when 318 cases were reported. The decrease in the number of cases reported in 1981 has continued to reverse the slight upturn seen in 1978 and 1979 (figure). The case rate per 100,000 population was 0.66 which is a 0.9 decrease from 1980; the national case rate in 1981 was 1.7.

Rubella cases were reported from 19 (28.4%) of Florida's 67 counties compared to 32 (48%) of the counties in 1980. Dade, Palm Beach, and Pinellas accounted for 48% (32 cases) of the State's total with the remainder of cases scattered throughout the state.

Rubella cases occcurred most frequently during the winter and spring months. 73% (49 cases) occurred during the first six months of the year. Females accounted for 57% of the cases. The highest age group specific incidence was reported in the 1-4-year-old age group (19 cases, 4.3 rate) and in the less than one-year-old age (36 cases, 2.3 rate). Adults in the 20-24 age group had a 1.5 per 100,000 population rubella rate (13 cases). In all, those over age 30 accounted for 43% of the 67 cases. However, considering the difficulty in clinically diagnosing rubella, it is possible that some of the cases reported in infants and young children were rash illnesses caused by other viral agents.

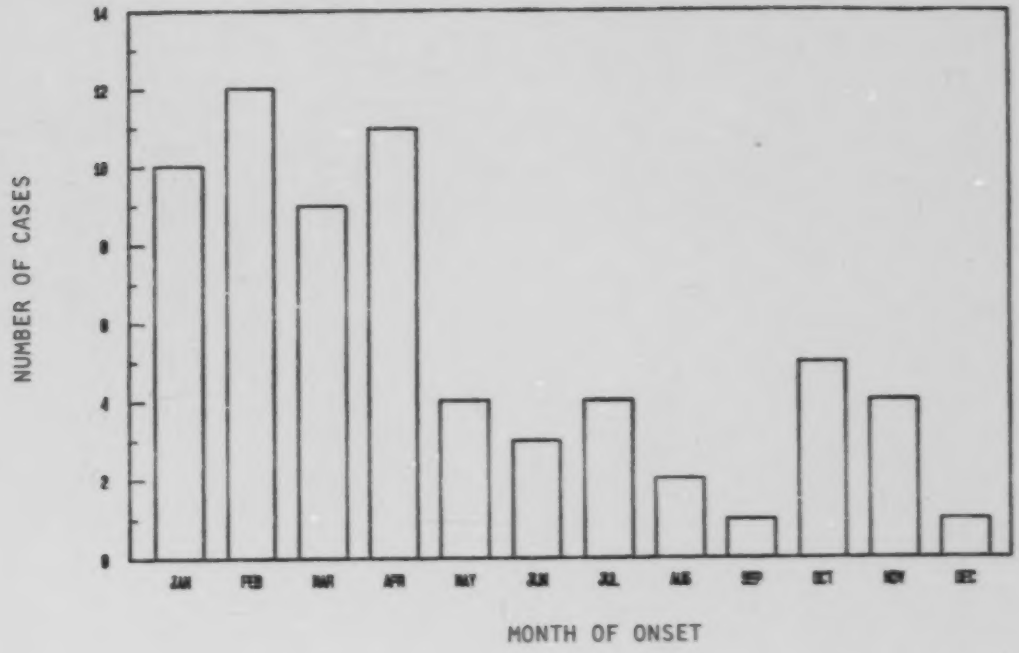
Congenital rubella syndrome is, fortunately, uncommon in Florida. From 1971 through 1978, there were only five cases reported; in 1979, there were four cases; 1980, two cases. In 1981, despite the occurrence of 21 cases of rubella in females of childbearing age, there was only 1 case of congenital rubella syndrome. Even though this syndrome is fairly rare at present, the resultant disability of an infected baby and the impact upon the family and society are considerable. It is probable that these reported cases do not reflect the true incidence of this syndrome inasmuch as some of its less obvious signs are not always identified at birth and, therefore, cases may go undiagnosed and unreported. Maintaining high immunization levels and identifying and immunizing susceptible women of the child-bearing age are essential in the prevention of this catastrophic disease.

RUBELLA - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

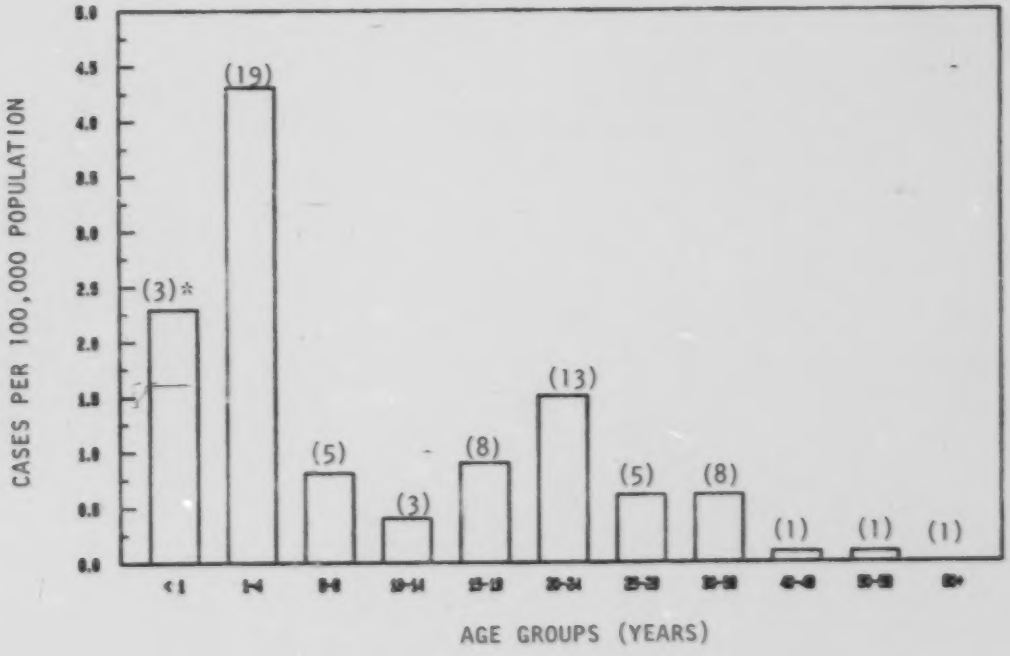
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua										2	1			3	1.9	52.0
Baker															0.0	2.3
Bay															0.0	2.4
Bradford															0.0	0.0
Brevard															0.0	0.6
Broward	2	1		1	2				1					7	0.7	1.7
Calhoun															0.0	7.4
Charlotte															0.0	0.6
Citrus															0.0	2.7
Clay															0.0	0.5
Collier															0.0	4.1
Columbia															0.0	3.0
Dade	2	6	4	1		1	1			1			1	17	1.0	1.0
DeSoto															0.0	1.8
Dixie															0.0	8.7
Duval		1												1	0.2	1.0
Escambia															0.0	0.7
Flagler															0.0	6.7
Franklin															0.0	0.0
Gadsden															0.0	0.8
Gilchrist															0.0	0.0
Glades															0.0	11.1
Gulf															0.0	6.1
Hamilton															0.0	0.0
Hardee															0.0	1.8
Hendry	1													1	5.1	5.6
Hernando															0.0	0.8
Highlands															0.0	0.0
Hillsborough				1				1		1				3	0.5	4.2
Holmes					1							1		2	13.3	6.9
Indian River															0.0	0.6
Jackson															0.0	1.7
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake															0.0	1.7
Lee															0.0	0.3
Leon															0.0	2.3
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee			1	2										3	1.9	3.0
Marion															0.0	0.6
Martin															0.0	0.6
Monroe															0.0	2.2
Nassau															0.0	1.0
Okaloosa															0.0	1.8
Okeechobee															0.0	0.0
Orange															0.0	1.1
Osceola															0.0	0.7
Palm Beach	1	1	1	4										7	1.1	0.9
Pasco	1	1									1			3	1.4	3.2
Pinellas			3	1			1			1	2			8	1.1	0.9
Polk	2				1	1								4	1.2	1.2
Putnam															0.0	0.0
St. Johns				1										1	1.8	1.4
St. Lucie															0.0	0.8
Santa Rosa															0.0	1.9
Sarasota															0.0	0.2
Seminole		1												1	0.5	1.0
Sumter															0.0	17.6
Suwanee															0.0	3.1
Taylor															0.0	2.1
Union		1												1	9.6	0.0
Volusia							1							1	0.4	0.9
Wakulla							1							1	9.1	0.0
Walton	1							1						2	9.2	1.6
Washington						1								1	6.7	0.0
STATE TOTAL	10	12	9	11	4	3	4	2	1	5	4	1	1	67	0.7	2.3

* 1978-1980 Average rate

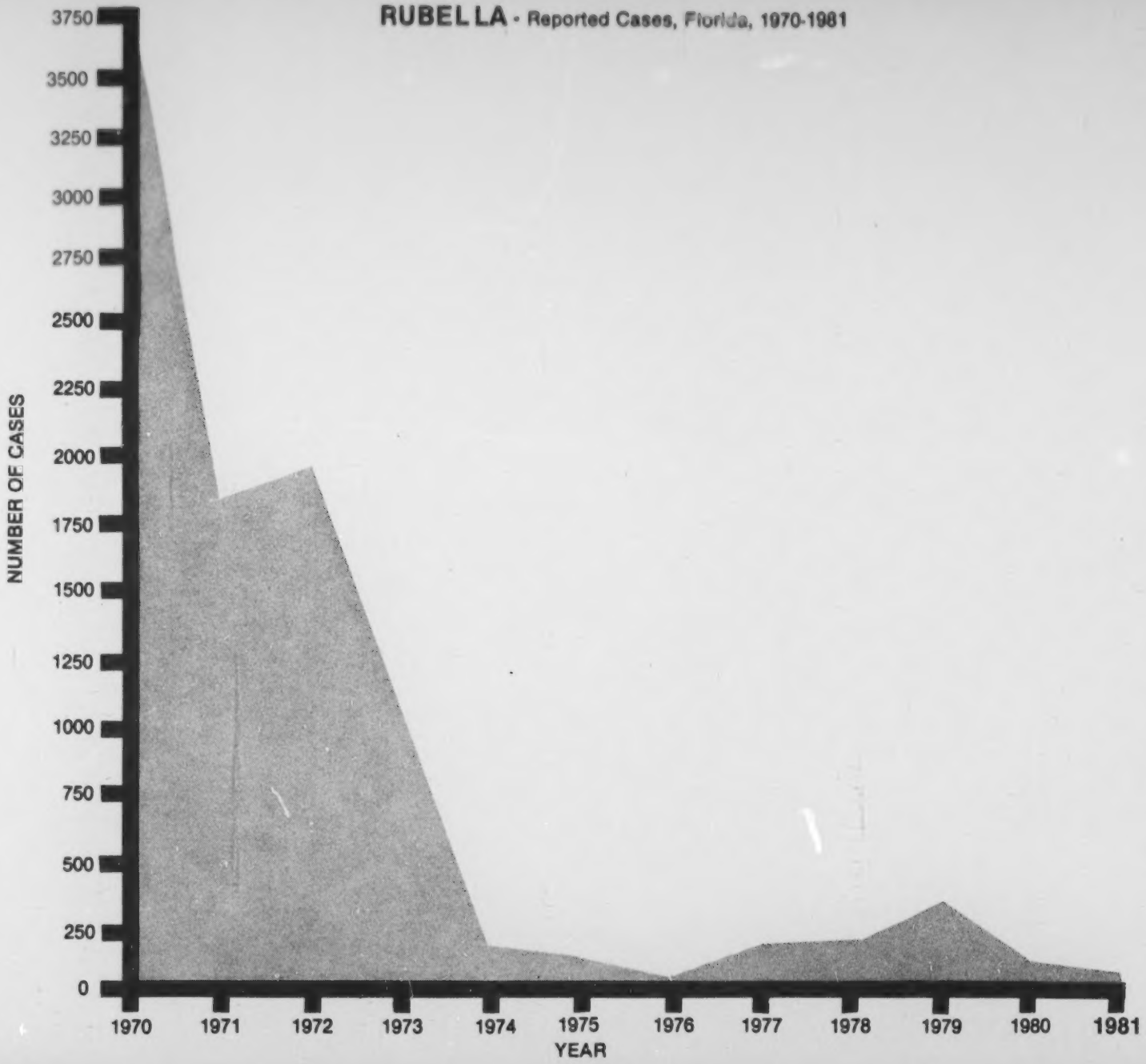
RUBELLA (GERMAN MEASLES) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



RUBELLA (GERMAN MEASLES) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Number of reported cases


RUBELLA - Reported Cases, Florida, 1970-1981
NUMBER OF CASES
3750
3500
3250
3000
2750
2500
2250
2000
1750
1500
1250
1000
750
500
250
0
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
YEAR

SALMONELLOSIS

There were 2,194 cases of salmonellosis reported in Florida during 1981 which represents an 8% increase in reported cases over the preceeding year (2,031). The case rate (21.5 cases per 100,000 population) increased slightly (3.9%) from 1980 (20.7/100,000). Cases were reported from 57 (85%) of Florida's 67 counties.

Of the reported cases, 1,125 (51%) were male, 1,046 (48%) female, and 23 (1%) indicated sex unknown. Of the 2,194 cases, 1,598 (73%) were in whites, 389 (18%) were in blacks, while all other race categories accounted for 24 (0.01%), and 183 (8%) reported cases did not have race indicated.

The age group with the highest incidence rate was the < 1 year olds (356.3/100,000), which was greater than twice the incidence of the next higher age group, the 1-4 year-olds (156.0/100,000). There was a dramatic decrease in incidence rates in all age groups above the 1-4 year-olds. The reason for this lower incidence in older age groups is not known; however, it may be due to truly lower infection rates, lower illness rates following infection, a greater use of diagnostic culturing in infants, or a combination of all these.

There was no geographic clustering of cases in any particular area within the state. Twenty-seven (40%) Florida counties had an incidence rate higher than the national rate (17.4/100,000). As in previous years, there was a seasonal increase in reported cases during late summer.

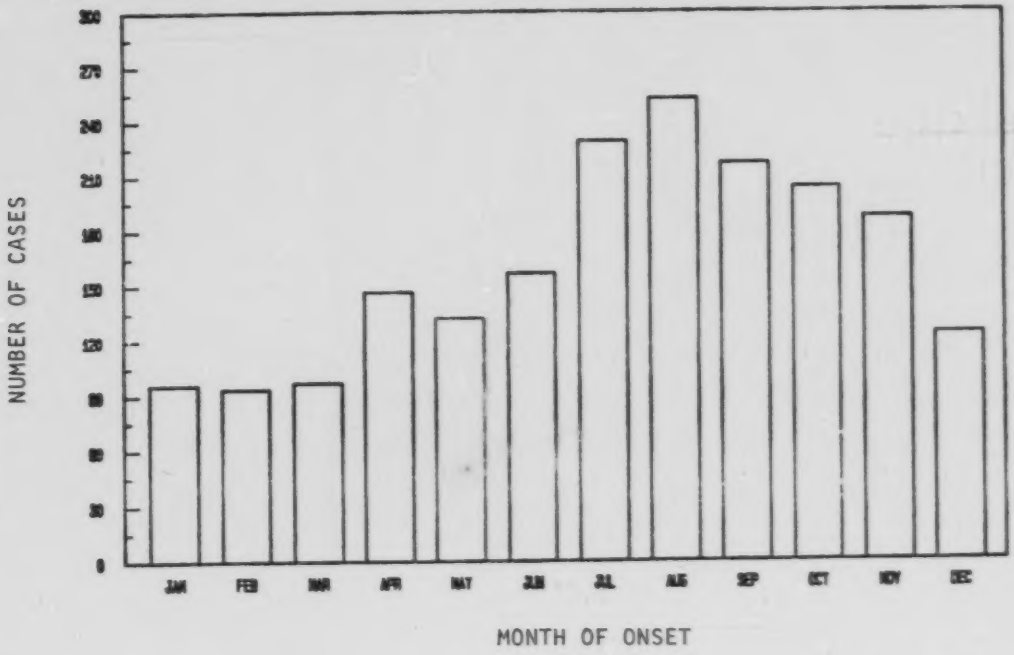
There were no reported outbreaks of salmonella this year. There was one death reported due to salmonella gastroenteritis.

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

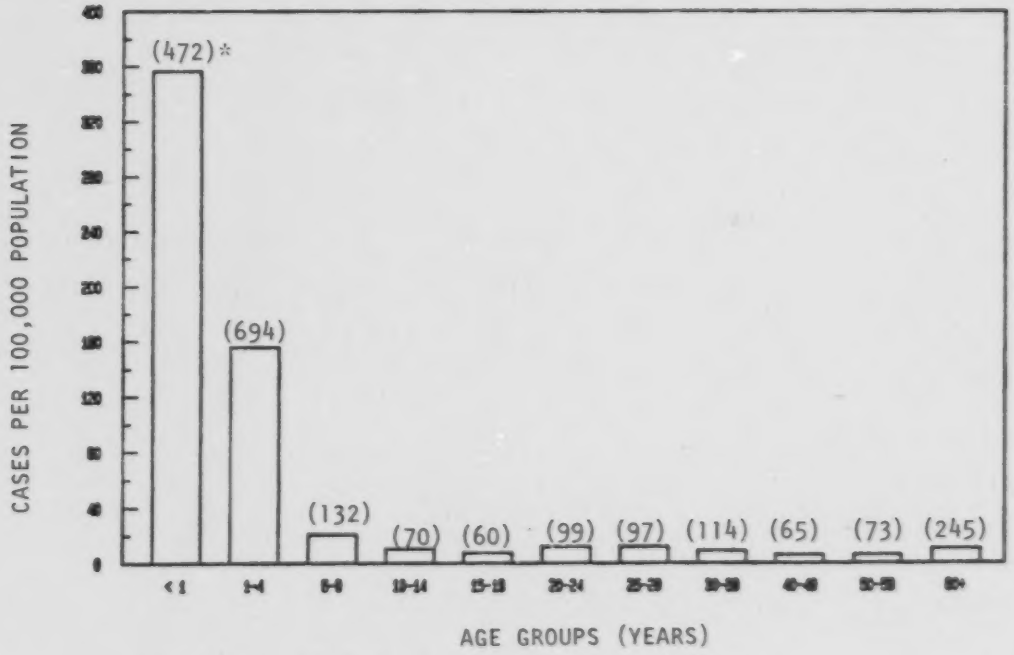
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua	1	1		1	2		2	8	1	4	1	2		23	14.8	19.7
Baker								2				1		3	18.8	6.9
Bay					8	3	10	18	4	1		3	6	53	52.6	30.6
Bradford															0.0	5.3
Brevard		3	3	2	1	7	5	5	4	3	2	2	15	52	18.3	26.1
Broward	3	14	15	22	15	9	14	19	14	11	13	7	7	163	15.5	10.6
Calhoun													2	2	21.3	11.0
Charlotte	1	4	1	1		3	2	2		3	5	8	4	34	54.5	36.4
Citrus		1	2			1			1	2			4	11	18.2	10.2
Clay				2			2	1	1		1			7	9.9	19.9
Collier	2	2	5	1		1	7	3	3	2	5	1		32	34.6	27.3
Columbia			1	1	3	1	1	1		1		1	1	11	30.6	38.8
Dade	18	15	19	16	9	19	9	16	8	12	13	11	118	283	16.2	17.1
DeSoto			1	1		1		1	1		1	1		7	36.0	33.5
Dixie					1								4	5	60.7	0.0
Duval	4	3	5	10	3	13	21	18	22	12	15	12	5	143	24.8	31.4
Escambia	4	2	2	3	4	4	9	9	2	2	1	3	3	48	19.9	14.6
Flagler			1				2							3	24.1	13.5
Franklin															0.0	4.2
Gadsden	1	2	1	1	2	4		2	2	3	1	2		21	49.8	8.3
Gilchrist	1			1									1	3	46.5	23.2
Glades															0.0	0.0
Gulf															0.0	12.3
Hamilton								1		1				2	23.0	41.7
Hardee															0.0	1.8
Hendry	1			1		2								4	20.4	31.5
Hernando			1				2	2	3	1				9	18.1	13.3
Highlands						1		2	2	1				6	11.9	2.1
Hillsborough	8	7	1	5	11	9	12	19	13	14	19	8	1	127	19.1	18.7
Holmes															0.0	0.0
Indian River													1	1	1.6	6.4
Jackson				1			2	1						4	10.0	3.4
Jefferson															0.0	0.0
Lafayette							1							1	25.0	8.0
Lake				1	1	3	2	1	2	1	1			12	11.0	8.7
Lee	5			1	1	1	5	8	11	11	3	2	18	66	30.4	23.6
Leon	4	5		1	2	1	10	11	17	14	3	1	2	71	46.4	32.8
Levy			1		2		1			1	2			7	33.8	7.1
Liberty															0.0	7.8
Madison											1			1	6.6	2.3
Manatee	1		1	2	1	1	4	4	10	2	4		3	33	21.2	19.7
Marion	1			1		1	1	4	8	6			7	29	22.1	3.5
Martin	1			1	3	2	4	4	1	1	1	5		23	33.6	5.0
Monroe				2	3		1	1		1				8	12.4	12.0
Nassau						1	1	3	2	1	1			9	26.5	17.4
Okaloosa	1		2	2	1	4	6	1						17	15.0	50.0
Okeechobee	2	1	1	2	2					2		4		14	65.5	36.8
Orange	6	12	7	9	15	8	11	9	11	15	24	8	11	146	30.1	23.3
Osceola	2				3	3	3		2	2	1	1	3	20	35.2	28.9
Palm Beach	5	2	4	7	11	9	16	16	14	13	17	15	14	143	22.9	16.3
Pasco		2	1	4	2		6	4	4	1	4	1		29	14.0	12.7
Pinellas	8	4	7	16	12	16	19	15	32	31	9	3	2	174	23.3	23.1
Polk	4	5	5	13	2	8	7	10	7	8	13	4	13	99	29.7	27.4
Putnam	2	4		1	1		2	5	2	3			2	22	42.8	24 8
St. Johns	1	1					1					1		4	7.4	9.0
St. Lucie	1		1	2	1			1	2		2	4		14	14.5	11.2
Santa Rosa		1	1	1		2	1		1		1			8	13.9	6.2
Sarasota	3		3	2	3	4	12	7	5	3	10	4		56	26.5	20.2
Seminole	1	2	1	2	4	9	6	4	2	10	5	4	2	52	27.6	31.1
Sumter							1							1	4.0	2.9
Suwanee							1							1	4.2	3.1
Taylor															0.0	6.3
Union				1										1	9.6	9.5
Volusia	4	1	4	6	3	4	7	13	2	3	8	4	12	71	26.2	24.3
Wakulla								1					1	2	18.3	45.2
Walton						1			1	1				3	13.8	4.9
Washington															0.0	9.0
STATE TOTAL	96	94	97	146	132	156	229	252	217	203	187	123	262	2194	21.5	19.4

*1978-1980 Average rate

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



SALMONELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

SHIGELLOSIS

In 1981, there were 784 cases of shigellosis reported in Florida, a 15.4% decrease from 1980 (927 cases). The annual incidence of shigellosis was 7.7 cases per 100,000 population, which represented an 18.1% decrease from the 1980 rate (9.4). The seasonality for shigellosis showed the usual increase in number of reported cases in the summer months. Thirty-eight (56.7%) of Florida's 67 counties reported cases. The highest attack rate (67.3 per 100,000) occurred in children age 1-4 years. The reported incidence among different age groups decreased generally with increasing age except for the 20-29 year age group. This perhaps reflects an increased incidence of shigellosis in parents with young children which may be due to intra-familial spread. Most cases of shigellosis were due to Shigella sonnei. Of 348 isolates of shigella characterized by the Florida State Laboratories, 244 (70.1%) were S. sonnei, 80 (23.0%) were S. flexneri, 7 (2.0%) were S. dysenteriae (not typed), and 17 (4.9%) were S. boydii.

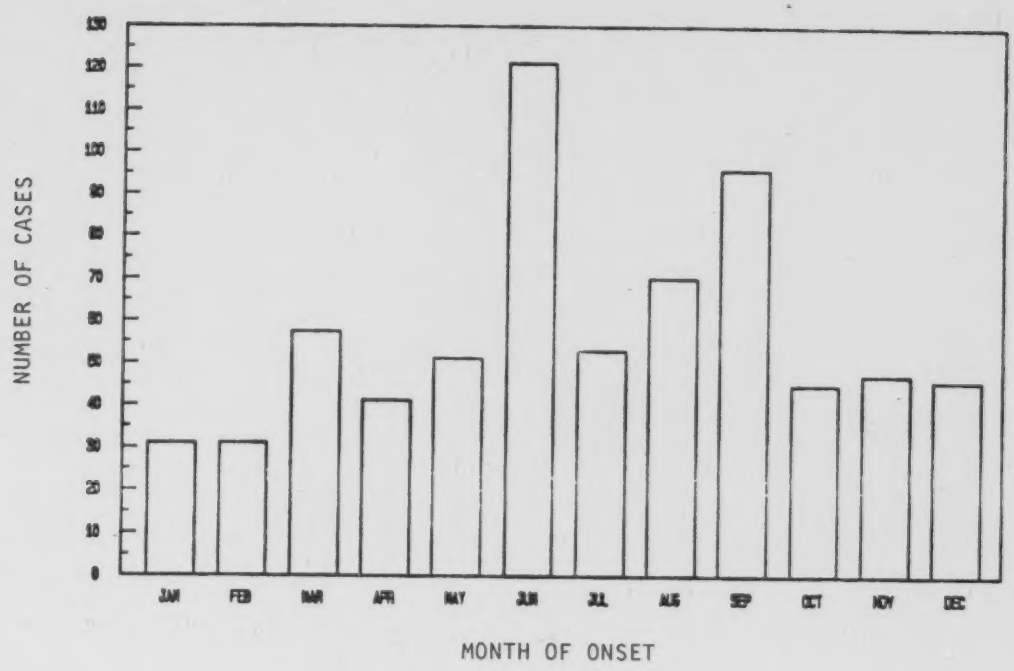
In 1981, no outbreaks of shigellosis were reported and there were no reported deaths due to this disease.

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1981

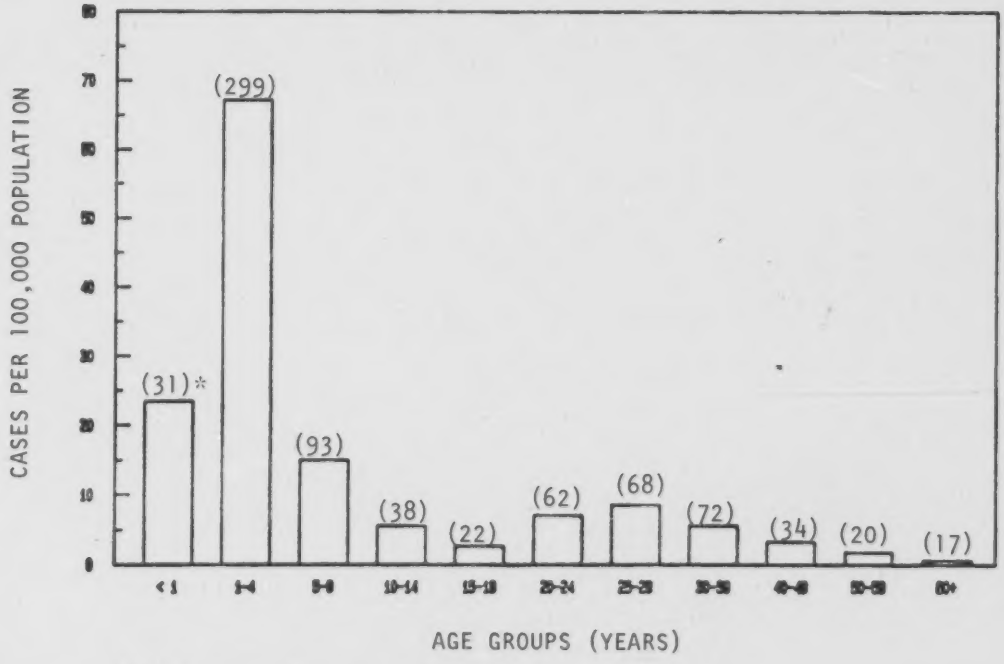
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua		3	3	1	1	4	1		2		1			16	10.3	4.8
Baker															0.0	2.3
Bay															0.0	0.7
Bradford															0.0	3.5
Brevard				2	3	4	1			1		1	9	21	7.4	4.8
Broward	2	1	4	2	2	7	5	3	5	4	4	5		44	4.2	5.1
Calhoun				1			1					2		4	42.5	3.7
Charlotte	1		5						10			2		18	28.9	4.2
Citrus			1											1	1.7	6.8
Clay															0.0	10.8
Collier			1		10			1			3	6		21	22.7	19.6
Columbia															0.0	7.0
Dade	5	12	12	11	6	13	3	11	6	10	6	4	59	158	9.1	14.0
DeSoto									2					2	10.3	0.0
Dixie															0.0	0.0
Duval	2	1			2	1	1	3	2	4	2	4	1	23	4.0	12.2
Escambia			1	1						1	1	3	1	8	3.3	3.3
Flagler															0.0	3.4
Franklin															0.0	0.0
Gadsden	1	1			1	1	2	2	3	3	3	1		18	42.7	10.8
Gilchrist															0.0	5.8
Glades															0.0	5.5
Gulf															0.0	0.0
Hamilton															0.0	3.8
Hardee															0.0	1.8
Hendry					2				1		1		1	5	25.4	31.5
Hernando										1				1	2.0	3.3
Highlands											1		1	2	4.0	0.7
Hillsborough	8	2	9	6	6	3	4	11	5	4	6	1	2	67	10.1	11.4
Holmes															0.0	0.0
Indian River					2					1				3	4.7	7.0
Jackson						67	12	6					1	86	216.0	0.0
Jefferson															0.0	0.0
Lafayette															0.0	8.0
Lake				1					1					2	1.8	1.3
Lee		1	3	1								1	4	10	4.6	12.4
Leon	1		1	3		2			2			2		11	7.2	16.1
Levy									4					4	19.3	7.1
Liberty															0.0	23.5
Madison								1						1	6.6	4.5
Manatee	1	1	2	2				2	2	1		1		12	7.7	8.1
Marion								16	43		1		2	62	47.3	0.0
Martin			1			1	1	1					1	5	7.3	7.8
Monroe	1				1	1	1	1			1	1		7	10.9	3.8
Nassau															0.0	4.1
Okaloosa															0.0	2.4
Okeechobee															0.0	1.7
Orange	5		7			5	4		2	2		3	2	30	6.2	6.9
Osceola					3	7		2		5	1	1		19	33.4	117.0
Palm Beach	1	2	1	1	3	1	10	2	1	4	11	3	7	47	7.5	6.5
Pasco		1			1	2					1			5	2.4	7.6
Pinellas	1	2	4	4	2	1		3	1	2		2		22	2.9	4.5
Polk	2	4	2	5	4	1	5	2	1			1	1	28	8.4	21.6
Putnam					2			1	1					4	7.8	22.7
St. Johns															0.0	7.6
St. Lucie							1							1	1.0	7.2
Santa Rosa															0.0	6.8
Sarasota									1		3	1		5	2.4	1.4
Seminole								2		2			1	5	2.7	6.8
Sumter															0.0	42.4
Suwanee															0.0	4.6
Taylor															0.0	4.2
Union															0.0	12.6
Volusia							1		1		1	1	2	6	2.2	2.6
Wakulla															0.0	67.8
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	31	31	57	41	51	121	53	70	96	45	47	46	95	784	7.7	9.1

*1978-1980 Average rate

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1981



SHIGELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1981



*( ) Reported number of cases

SECTION 3:

Analysis of Animal Rabies & Zoonotic Diseases

ANIMAL RABIES

In 1981, an 11 year high was reached in the number of confirmed animal rabies cases (table). Of 4,426 animal specimens examined, 116 (2.6%) were positive by the fluorescent rabies antibody test (FRA).

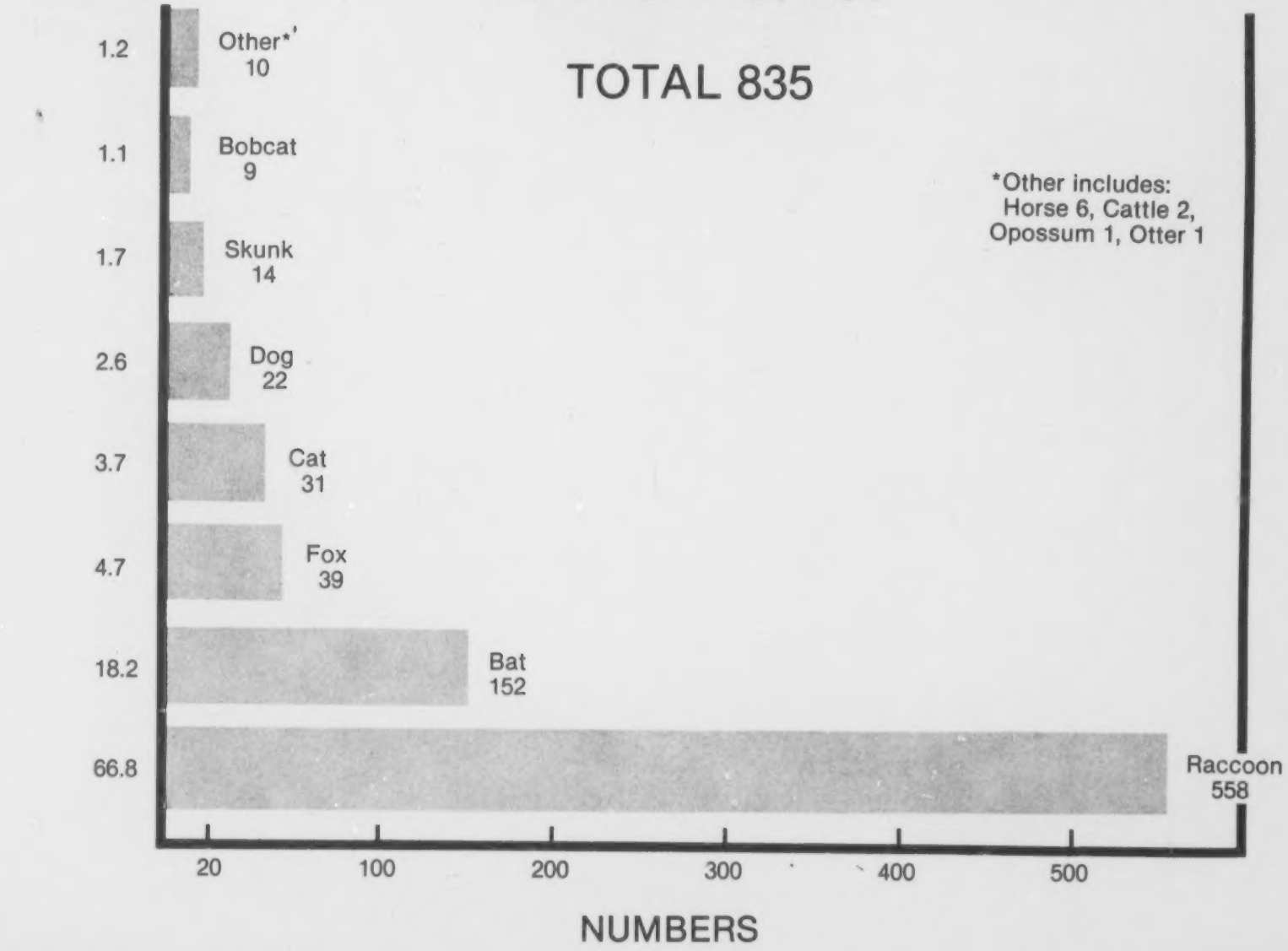
Rabies positive animals were identified in 35 counties compared to 39 counties in 1980 and 34 counties in 1979 (table). During the last 12 years (1970-1981) rabies has been identified in 63 (94.0%) of Florida's 67 counties (figures). Although cases have occurred virtually throughout the entire state, the greatest preponderance have been identified in the central and north central portion of the state. Rabies cases have occurred throughout the year averaging 9.7 cases per month (range of 5-15 cases per month).

ANIMAL RABIES · Laboratory confirmed cases by species, Florida, 1972-1981

ANIMAL SPECIES	1981	1980	1979	1978	1977	1976	1975	1974	1973*	1972*
BAT	17	9	10	8	16	38	2	5	10	20
BOBCAT	0	2	0	2	1	1	0	0	2	1
CAT	7	3	5	1	2	3	0	0	1	6
CATTLE	0	1	0	0	0	0	0	1	0	0
DOG	1	4	3	1	1	1	2	0	3	5
EXOTIC ANIMALS	0	0	0	0	0	0	0	0	0	0
FOX	7	3	5	1	3	4	0	5	3	4
HORSE	1	1	1	0	0	0	2	0	0	1
LAGOMORPHS (includes rabbit, hare & pika)	0	0	0	0	0	0	0	0	0	0
OPOSSUM	1	0	0	0	0	0	0	0	0	0
OTTER	0	0	0	0	1	0	0	0	0	0
RACCOON	79	84	54	33	69	51	30	39	22	49
RODENTS (includes mice, hamsters, guinea pigs, gerbils, squirrels, rats)	0	0	0	0	0	0	0	0	0	0
SKUNK	3	3	1	1	0	0	1	0	1	1
STATE TOTAL	116	110	79	47	93	98	37	50	42	87

*Revised

ANIMAL RABIES IN FLORIDA 1971-81



RABIES - LABORATORY CONFIRMED CASES AND SPECIMENS EXAMINED, FLORIDA, 1981

Species	Number Examined	Number and Percent( ) Positive	Percent of All Species Examined (N=4,426)	Percent of All Positive (N=116)
Dogs	1,005	1 (0.1)	22.7	0.9
Cats	1,210	7 (0.6)	27.3	6.0
	2,215	8 (0.4)	50.0	6.9
Raccoons	659	79 (12.0)	14.9	68.1
Bats	173	17 (9.8)	3.9	14.7
Skunks	159	3 (1.9)	3.6	2.6
	991	99 (10.0)	22.4	85.3
Fox	160	7 (4.4)	3.6	6.0
Bobcat	0	0 (0.0)	0.0	0.0
Other wild	283	1 (0.4)	6.4	0.9
	443	8 (1.8)	10.0	6.9
Cattle	8	0 (0.0)	0.2	0.0
Horse	1	1 (100.0)	0.0	0.9
Other Domestic	37	0 (0.0)	0.8	0.0
	46	1 (2.2)	1.0	0.9
Rodents and Lagomorphs	731	0 (0.0)	16.5	0.0
TOTAL ALL SPECIES	4,426	116 (2.6)	99.9	100.1

ANIMAL RABIES - Reported laboratory confirmed cases by county, Florida, 1972-1981

County	1981	1980	1979*	1978*	1977*	1976	1975	1974	1973	1972*
Alachua	4	9	5	2	3	4		5	4	2
Baker		1					1			1
Bay	2		3	1	2	3			2	
Bradford		2								2
Brevard			2		2	8	1	1	3	6
Broward	1				1					
Calhoun	1	2								
Charlotte			1		1	1				1
Citrus					3	1	1	1	2	3
Clay	1				1	1	1			1
Collier	1		2	2	3			3	1	3
Columbia	4	4	2	1	3	3				
Dade		1		1	2	1		8	1	
DeSoto			1		1	1				1
Dixie	1							1		
Duval	6	9	4	2	3	7	1	2	2	3
Escambia	1	1						1		2
Flagler	3	1	1				3			
Franklin										
Gadsden	3	1	4	1		3				4
Gilchrist		1				1				1
Glades										
Gulf				1			1			
Hamilton	2	1	1	1	3	2				
Hardee	2	2	3		2					
Hendry							1		1	3
Hernando								1		
Highlands	1	2						1		
Hillsborough	3	2	5	6	5	11	3	2	5	3
Holmes	5	3	2			3	2	2	1	
Indian River						1				
Jackson	7	1	3	1	2	3	1	1	1	1
Jefferson	2	4	2			1	1		1	
Lafayette		4	1							
Lake	3	3	2				1		1	
Lee	7	2	3				1			3
Leon		13	5	3	2	3	3		2	4
Levy			1	1	1			1	5	6
Liberty										
Madison	3	3		2	1	3		1		3
Manatee	2	1	2	1			2	3		
Marion	7	4	5		9	1	1	2		1
Martin									1	
Monroe										
Nassau		1	1		2	5	2	1	1	1
Okaloosa	1	2	2	1	2			1		
Okeechobee										2
Orange	1	1	1	1	3	9	2	1		
Osceola				2	1	1				2
Palm Beach	1	1							2	1
Pasco										1
Pinellas										
Polk	10	2		1	2	1		3		12
Putnam	3	2	1		2	1	1			
St. Johns	2			5	3	1	2		1	1
St. Lucie										
Santa Rosa						1				
Sarasota		5	2	5	21	4	1	3	4	1
Seminole	1	1	1	1	1	5		1		
Sumter					1					
Suwannee	14	3	2		2			2		
Taylor	1	1		1						
Union								2		2
Volusia	7	7	3		2	6	1		1	6
Wakulla		1	2	1						3
Walton	3	3	2	1	1	2	2			
Washington		3	2	2			1			1
STATE TOTAL	116	110	79	47	93	98	37	50	42	87

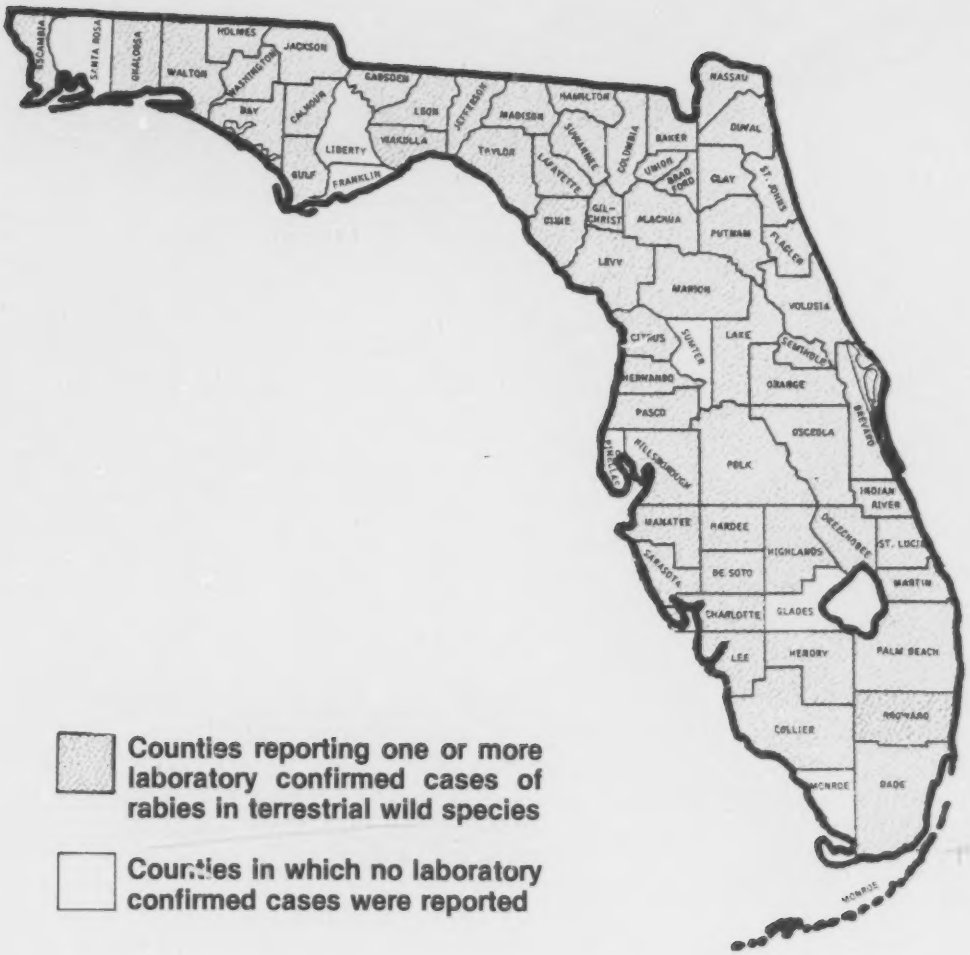
*Revised

ANIMAL RABIES, FLORIDA, 1970-1981
Terrestrial, Domestic

Counties reporting one of more laboratory confirmed cases of rabies in terrestrial domestic species

Counties in which no laboratory confirmed cases were reported

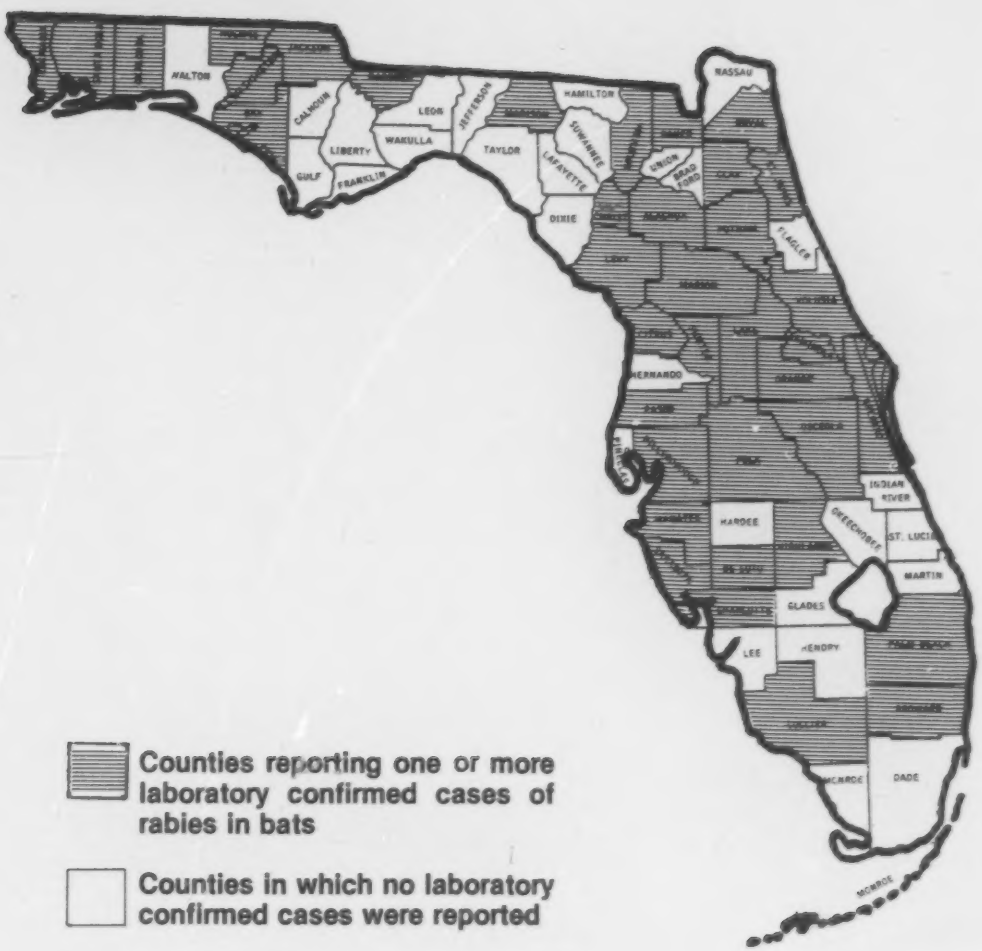
ANIMAL RABIES, FLORIDA, 1970-1981
Terrestrial, Wild



Counties reporting one or more laboratory confirmed cases of rabies in terrestrial wild species

Counties in which no laboratory confirmed cases were reported

ANIMAL RABIES, FLORIDA, 1970-1981
Bat



ANIMAL RABIES -- REPORTED LABORATORY-CONFIRMED CASES, BY COUNTY, BY SPECIES, BY MONTH OF REPORT, FLORIDA 1981

County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua			1 rac			1 rac			1 horse		1 rac		4
Baker													
Bay			1 dog								1 cat		2
Bradford													
Brevard													
Broward						1 fox							1
Calhoun			1 rac										1
Charlotte													
Citrus													
Clay							1 bat						1
Collier							1 rac						1
Columbia			1 rac				1 bat 1 rac					1 rac	4
Dade													
DeSoto													
Dixie		1 rac											1
Duval	1 bat 1 rac			1 rac				1 bat 1 rac	1 bat				6
Escambia		1 opossum											1
Flagler		1 rac								1 cat	1 rac		3
Franklin													
Gadsden			1 rac							2 rac			3
Gilchrist													
Glades													
Gulf													
Hamilton				1 fox	1 rac								2
Hardee						1 fox			1 rac				2
Hendry													
Hernando													
Highlands											1 rac		1
Hillsborough							1 bat	1 bat	1 bat				3
Holmes	1 rac				1 bat			1 skunk 1 rac		1 skunk			5
Indian River													
Jackson		1 rac	1 rac		1 rac	1 rac	1 cat				1 rac	1 rac	7
Jefferson		1 rac							1 rac				2
Lafayette													
Lake		1 rac							1 bat 1 rac				3
Lee					1 rac		1 rac	2 rac	1 rac	2 rac			7
Leon													
Levy													
Liberty													
Madison			1 rac				1 rac			1 fox			3
Manatee									1 rac			1 bat	2
Marion	1 cat		1 rac	1 cat		2 rac	1 fox		1 rac				7
Martin													
Monroe													
Nassau													
Okaloosa					1 bat								1
Okeechobee													
Orange			1 cat										1
Osceola													
Palm Beach							1 bat						1
Pasco													
Pinellas													
Polk	1 rac					1 bat	1 bat			1 rac	1 bat 3 rac	2 rac	10
Putnam				1 rac						2 rac			3
St. Johns					1 rac	1 rac							2
St. Lucie													
Santa Rosa													
Sarasota													
Seminole						1 rac							1
Sumter													
Suwannee		1 rac	1 rac	1 rac	3 rac		1 cat 1 rac	2 rac			1 skunk 1 rac	2 rac	14
Taylor		1 rac											1
Union													
Volusia					1 rac			1 bat	3 rac		1 rac	1 rac	7
Wakulla													
Walton				1 rac					2 fox				3
Washington													
TOTAL	5	8	10	6	10	9	13	10	15	10	12	8	116

MOSQUITO-BORNE ENCEPHALITIS

Eastern Equine Encephalitis

There were no reported human cases of Eastern equine encephalitis (EEE) in 1981. Two counties participating in the SLE surveillance program utilizing sentinel chickens had seroconversions to EEE in their sentinels: Pasco (2), and Hillsborough (1). No other activity was reported during this calendar year.

St. Louis Encephalitis

In 1981, Florida reported one laboratory-confirmed human case of St. Louis encephalitis (SLE) (4-fold or greater rise and/or fall in hemagglutination inhibition (HI) or complement fixation (CF) antibody titer). The case occurred in a 25 year-old black male farm worker in LaBelle, Hendry County. This is the first time a case of SLE has been confirmed in a resident of Hendry County.

The patient began having shortness of breath, chest pains, dizziness, headache, numbness in hands, and changes in mental status on October 30. He was seen in a local hospital where he was given medications and sent home. After several days, the patient developed a severe headache, backache, and fever (102° F) and was admitted on November 3 to another hospital with a working diagnosis of encephalitis. A serum drawn on November 4 had an HI titer of 1:40 (CF 1:8) for SLE and a convalescent serum obtained on November 25 had an HI titer of 1:320 (CF 1:16). The patient was discharged from the hospital Nobember 7 with no apparent sequela.

Sentinel chicken flocks maintained in Hendry County and in neighboring Glades County did not identify any SLE activity during the 1981 SLE season. The patient stated that he traveled to Orlando to visit relatives during the early part of October. There was no other history of travel outside the area.

The Virology Unit of Central Laboratory Services in Jacksonville, and the Epidemiology Research Center in Tampa tested 2,668 human sera from patients presenting with central nervous system symptoms during calendar year 1981. The above-described case was the only confirmed SLE case identified; there were no presumptive cases identified.

In 1981, 32 Florida counties participated in an SLE surveillance system which utilized sentinel chicken flocks. These flocks were established and maintained near populated areas by county health unit or mosquito control district personnel. Flocks were bled every two weeks for evidence of an epizootic of SLE prior to SLE virus activity's spilling over into the human population.

There was a total of 6,484 sentinel chicken sera tested and 35 seroconversions to SLE in 1981. Virus activity was first identified in sentinel chickens from a bleeding on August 12 in Pinellas County. Six counties, all located in central Florida, had seroconversions: Pinellas (18), Hillsborough (8), Pasco (3), Orange (3), Manatee (2), and Charlotte (1).

One hundred sixty-nine Culex nigripalpus mosquito pools were collected in Hillsborough and Pinellas Counties and processed for virus isolation. Two SLE virus isolations were made, one from a pool of 60 mosquitoes collected in Hillsborough County on August 28 and a second isolate from a pool of 50 mosquitoes collected in Pinellas County on September 22. This is the first time an SLE virus isolate has been made in the Tampa Bay area in the absence of a confirmed human case.

ZOONOTIC DISEASES

Brucellosis

In 1981, brucellosis continued to be a disease of infrequent occurrence in Florida. There were 16 cases reported in 1981 compared to 7 cases in 1980, 11 in 1979, 10 in 1978, 11 in 1977 and 8 in 1976. The overall 1981 case rate per 100,000 population was 0.16. Cases were reported between February and September.

Two cases occurred in Broward, Hamilton, Hillsborough, Lee and Pinellas counties. One case occurred in Brevard, Collier, Jefferson, Okeechobee, Osceola and Polk counties. Of the 16 cases, 5 were in the 20-29 age group, 2 were in the 30-39 age group, 4 in the 40-49 age group, 3 in the 50-59 age group and 2 over 60 years of age. All were male. Of 14 cases whose exposures were studied: 6 had been involved in wild pig/boar hunting and slaughtering, 2 were slaughter house workers, 2 worked in dairies, 1 was a cowboy and 2 had no known exposures (one was a nursing home resident).

Leptospirosis

In 1981, six cases of leptospirosis were reported compared to 11 cases in 1980. The ages ranged from 15 to over 60. They were, by age groups, one in 15-19 age group, one in 20-24, three in 30-39, one in the over 60 age group. Three cases gave a history of close contact with animals and/or contact with water that could have been contaminated with rodent, swine, or other animal urine.

The counties of occurrence were Dade, Hillsborough, Pinellas, Polk, Suwannee and Volusia. One case occurred in March, one in July, two in September, one in November and one unknown.

Psittacosis

Psittacosis appears to be a disease of infrequent occurrence in Florida. In 1981, there were 3 cases reported compared to five cases reported in 1980. All three were males, ages: 65, 66, and 78. One case occurred in January, one in March and one in August. The cases were reported from 3 counties: Broward, Duval and Marion. All three cases had contact with parrots or parakeets. Two of the three birds associated with the cases were ill and died.

ROCKY MOUNTAIN SPOTTED FEVER

In 1981, fourteen (14) cases of Rocky Mountain Spotted Fever (RMSF) were reported in Florida. Of these, six (43%) were laboratory confirmed by a four-fold rise in titer by indirect fluorescent antibody (IFA) test or a single high titer of $\geq$ 1:64 by IFA in a clinically-compatible case. Of the six confirmed cases, two gave a history of no travel outside the immediate area. One of these cases occurred in a 68 year old male resident of Polk County who gave a history of hiking and picnicking during the 14 days prior to his onset. A second case, a 58-year-old female from Walton County, gave a history of "berrypicking" prior to the onset of her illness. The remaining eight cases were reported based on testing by Weil-Felix (Proteus), clinical presentation, and epidemiologic information. Of these eight cases, six (75%) gave a history of travel to a known RMSF endemic area prior to onset of symptoms.

All cases occurred between April and November. The greatest numbers of cases, occurred in May (3), June (3), and August (4). All cases were white and eight (57%) were males. Three (21%) of the cases were 10-19 years old, three (21%) 20-29 years, two (14%) 30-39 years, two (14%) 40-59 years, and four (29%) 60+ years. Counties reporting cases were Palm Beach (6), Polk (2), Alachua (1), Clay (1), Dixie (1), Nassau (1), Volusia (1), and Walton (1).

Eleven (79%) of the 14 cases required hospitalization. The predominant symptoms included fever (86%), rash (86%), headache (79%), myalgias (71%), and rash on palms or soles (36%). There were no fatalities reported this year. Of the fourteen reported cases, exposure histories were obtained on 13 (93%). Of the 13 cases, nine (69%) gave a history of tick bite or attachment within 14 days of onset. Four (31%) were unable to recall a tick bite or attachment; however, each gave a history of exposure to a potentially tick-infected area within 14 days prior to onset.

Six serologic techniques exist to confirm a suspected case of Rocky Mountain Spotted Fever. IFA testing is the most sensitive test generally available and is now being used by Central Laboratory Services. CF testing, although much less sensitive, remains a widely used specific test. The Weil-Felix test (Proteus OX-19, OX-2) is available in most hospitals for initial screening of possible cases; however, it has poor specificity and it also has been reported to have low sensitivity. Either IFA or CF should be used to confirm a Weil-Felix positive case. MA (microagglutination), IHA (indirect hemagglutination), and LA (latex agglutination) are research tests which are not available generally.

For epidemiologic purposes, the Epidemiology/Communicable Disease Program (PDHEC) has adopted the diagnostic criteria from Centers for Disease Control (CDC) for a confirmed case which includes at least one of the following: 1) Four-fold rise in titer of antibody to spotted fever-group antigen by IFA, CF, MA, LA or IHA, 2) a single titer of $\geq$ 1:64 by IFA, in a clinically-compatible case, 3) positive immunofluorescence of skin lesion biopsy or organ tissue (autopsy) from a patient, or 4) isolation of R. rickettsii. A single titer of $\geq$ 1:320 by Proteus OX-19 or a four-fold rise in Proteus OX-19 ox OX-2 is considered a "probable" case.

ZOONOTIC DISEASES - Reported cases by disease, by county, Florida, 1981

DISEASES

	BRUCELLOSIS	LEPTOSPIROSIS	PSITTACOSIS	ROCKY MOUNTAIN SPOTTED FEVER
Alachua				1
Baker				
Bay				
Bradford				
Brevard	1			
Broward	2		1	
Calhoun				
Charlotte				
Citrus				
Clay				1
Collier	1			
Columbia				
Dade		1		
DeSoto				
Dixie				1
Duval			1	
Escambia				
Flagler				
Franklin				
Gadsden				
Gilchrist				
Glades				
Gulf				
Hamilton	2			
Hardee				
Hendry				
Hernando				
Highlands				
Hillsborough	2	1		
Holmes				
Indian River				
Jackson				
Jefferson	1			
Lafayette				
Lake				
Lee	2			
Leon				
Levy				
Liberty				
Madison				
Manatee				
Marion			1	
Martin				
Monroe				
Nassau				1
Okaloosa				
Okeechobee	1			
Orange				
Osceola	1			
Palm Beach				6
Pasco				
Pinellas	2	1		
Polk	1	1		2
Putnam				
St. Johns				
St. Lucie				
Santa Rosa				
Sarasota				
Seminole				
Sumter				
Suwannee		1		
Taylor				
Union				
Volusia		1		1
Wakulla				
Walton				1
Washington				
STATE TOTAL	16	6	3	14

SECTION 4:

Summary of Venereal Diseases

Prepared by Venereal Disease Program
Jack E. Wroten, Chief

SYPHILIS

Calendar year 1981 marked the reversal of a two-year downward trend in the number of syphilis cases (all stages) with 5,971 being reported, 1,587 more than in 1980. This represents a 36.2% increase. Case rates per 100,000 population increased from 44.7 to 59.1. Cases of primary and secondary syphilis increased 34.5% with 3,036 cases reported (30.9 per 100,000 population). This is 779 more cases than reported in 1980.

The syphilis rate per 100,000 population for the top ten counties with populations over 50,000 shows the following:

County	Syphillis cases/100,000 population
Hillsborough	63.5
Collier	48.3
Orange	46.2
Leon	45.4
Alachua	44.0
Dade	42.1
Manatee	41.4
Palm Beach	40.5
Broward	37.0

The majority (68.4%) of the 3,036 cases of primary and secondary syphilis were reported in persons 15 to 29 years old. Those 15 to 19 accounted for 16.1% (490) cases; those 20 to 24, for 30.4% (924 cases); and those 25 to 29, for 21.8% (662 cases).

Of total infectious cases, 2,055 (67.7%) were males and 981 (32.3%) females. Among the males, 724 (35.2%) were white and 1,331 (64.7%) other races; among females 179 (18.2%) white and 802 (81.7%) other races. Clinics, hospitals and other institutions reported 2,504 cases (82.4%) and private physicians 532 cases (17.5%).

1,376 cases of early latent syphilis, (disease under one year's duration) were reported. This is 310 more cases than reported in 1980, an increase of 29.1%. Late latent syphilis cases, (disease over one year's duration), increased 46.7% with 1,552 cases reported (494 more than 1980).

There were seven reported cases of congenital syphilis this year. With proper prenatal care, these cases could have been prevented.

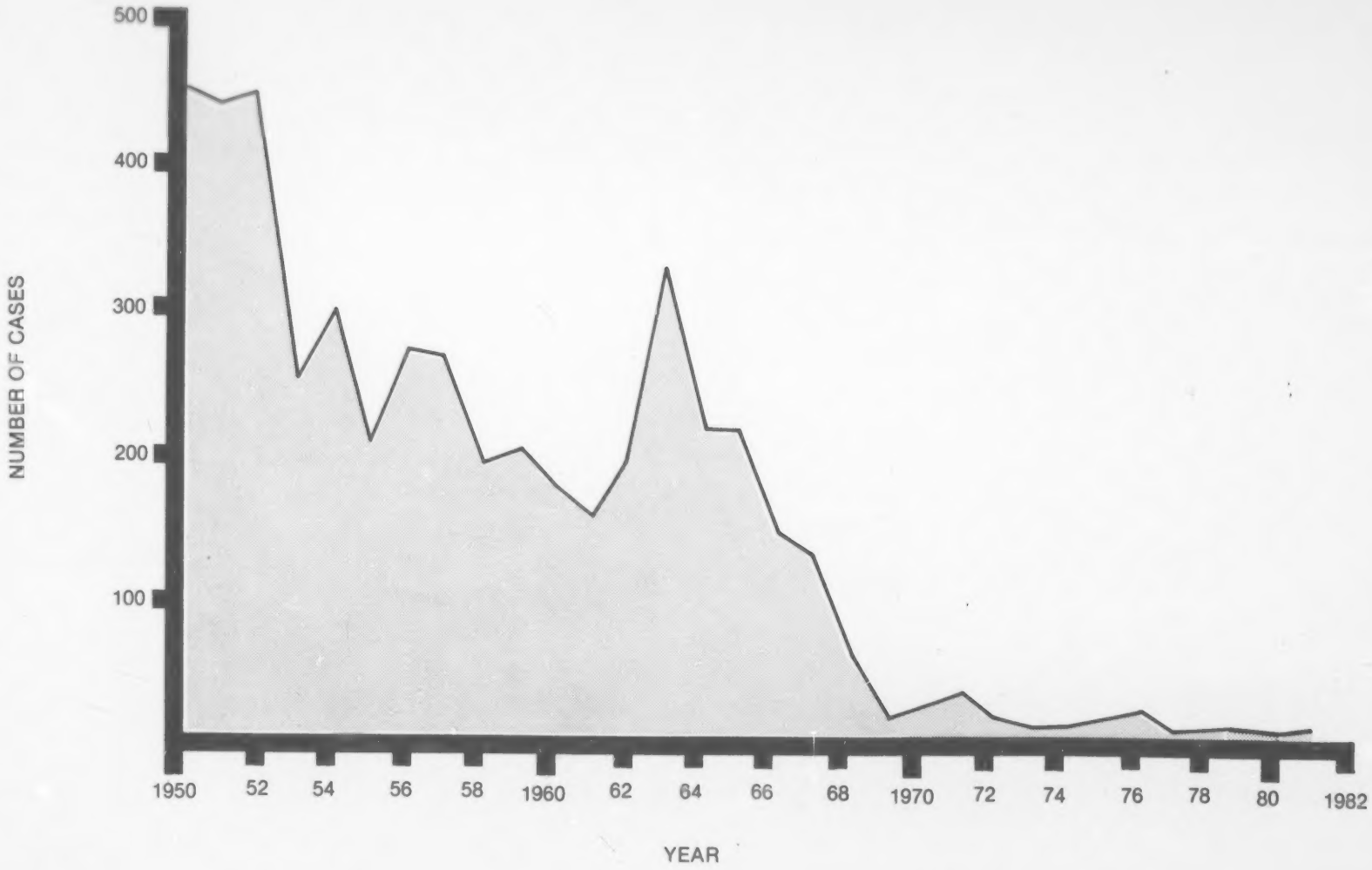
Patients reported to have early syphilis (primary, secondary, and early latent) are interviewed to identify sexual partners at risk of infection. This procedure is designed to identify and treat persons who may be incubating syphilis and those with undetected disease. The rapid application of this procedure helps prevent further disease transmission in the community. During 1981, 4,288 patients with early syphilis were interviewed. As a result, 6,708 persons were evaluated, and 1,128 new syphilis cases discovered; 2,938 sexual partners were given preventive treatment.

Primary & Secondary SYPHILIS - Reported Cases
By County, Florida, 1980-1981

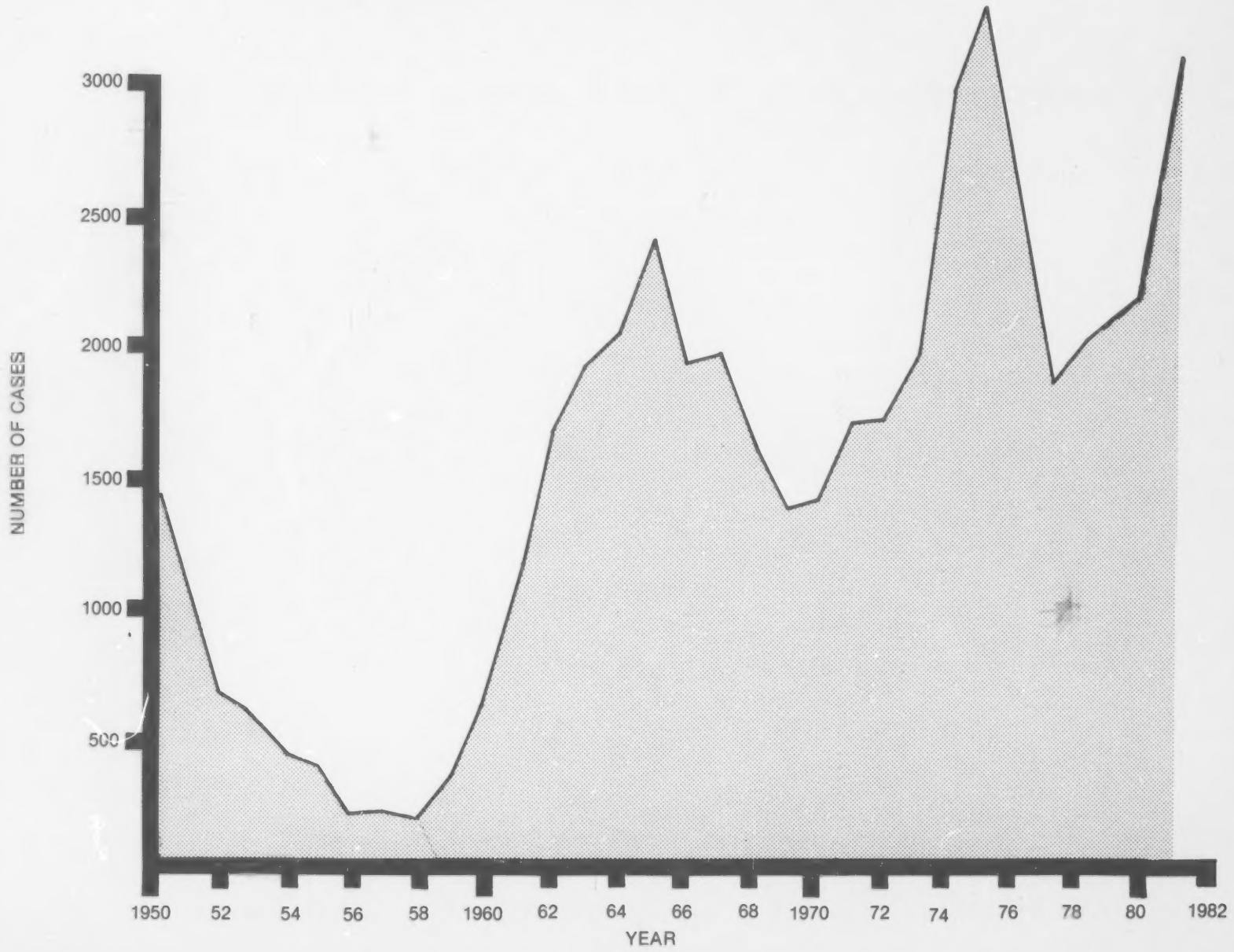
	1981	1980	%Change		1981	1980	%Change
Alachua	66	31	+112.9	Lee	75	40	+87.5
Baker	-	-	-	Leon	68	35	+94.3
Bay	14	4	+250.0	Levy	1	-	*
Bradford	6	1	+500.0	Liberty	-	-	-
Brevard	30	22	+36.4	Madison	-	1	-100.0
Broward	382	242	+57.9	Manatee	62	48	+29.2
Calhoun	-	-	-	Marion	24	25	-4.0
Charlotte	2	2	-	Martin	6	7	-14.3
Citrus	-	1	-100.0	Monroe	19	8	+137.5
Clay	2	2	-	Nassau	2	2	-
Collier	42	26	+61.5	Okaloosa	6	10	-40.0
Columbia	5	8	-37.5	Okeechobee	1	2	-50.0
Dade	677	596	+13.6	Orange	221	96	+130.2
DeSoto	3	6	-50.0	Osceola	2	1	+100.0
Dixie	-	-	-	Palm Beach	230	156	+47.4
Duval	86	77	+11.7	Pasco	13	4	225.0
Escambia	59	61	-3.3	Pinellas	171	108	+58.3
Flagler	-	-	-	Polk	103	119	-13.4
Franklin	2	3	-33.3	Putnam	6	7	-14.3
Gadsden	22	4	+450.0	St. Johns	20	52	-61.5
Gilchrist	-	1	-100.0	St. Lucie	28	46	-39.1
Glades	1	-	*	Santa Rosa	4	-	*
Gulf	-	1	-100.0	Sarasota	58	68	-14.7
Hamilton	6	3	+100.0	Seminole	12	15	-20.0
Hardee	2	-	*	Sumter	-	-	-
Hendry	8	8	-	Suwannee	-	2	-100.0
Hernando	3	1	+200.0	Taylor	5	2	+150.0
Highlands	3	3	-	Union	-	5	-100.0
Hillsborough	416	226	+84.1	Volusia	31	28	+10.7
Holmes	-	-	-	Wakulla	2	3	-33.3
Indian River	4	23	-82.6	Walton	-	-	-
Jackson	9	-	*	Washington	3	-	*
Jefferson	2	1	+100.0				
Lafayette	-	-	-	Institutions	2	2	-
Lake	9	12	-25.0				
				State Total	3,036	2,257	+34.5

(-) Indicates no change in morbidity from prior period
(*) Indicates percent change calculation cannot be made

CONGENITAL SYPHILIS · Reported cases, Florida, 1950-1981



PRIMARY & SECONDARY SYPHILIS - Reported cases, Florida, 1950-1981



GONORRHEA

Following a record-breaking 65,437 cases of gonorrhea reported in 1980, there was a decline of 7.8% in 1981, to 60,363 cases which includes nine cases of ophthalmia neonatorum. The case rate dropped to the lowest level since 1972 -597.0 per 100,000 population.

The rank and rate per 100,000 population for the top ten counties with 50,000 population and above show the following:

Rank	County	Rate
1	Leon	1277.6
2	Duval	1043.6
3	Orange	921.7
4	Monroe	873.2
5	Hillsborough	853.4
6	Alachua	840.1
7	St. Lucie	814.6
8	Escambia	810.6
9	Indian River	739.0
10	Dade	688.0

The majority of cases (50,892) were reported in persons 15 to 29 years old with those 15 to 19 accounting for 25.4% of total cases, those 20 to 24, 39.1% and those 25 to 29, 19.7%.

There were 37,086 cases (61.4%) among males and 23,277 (38.5%) among females. Of these 23,405 (38.7%) were white and 36,958 (61.2%) other races. Clinics, hospitals and other institutions reported 52,517 (87%) of cases and private physicians 7,846 (12.9%).

During the past several years, Venereal Disease Control Program activities aimed at the control of gonorrhea have been emphasized. Primary efforts have been directed toward reducing the serious debilitating consequences of prolonged infection. Priorities were established to detect young females diagnosed with gonococcal pelvic inflammatory disease (GPID) and to identify sex contacts for referral for examination and treatment. These priorities were in addition to the gonorrhea screening program for females and to previous procedures aimed at combating the penicillin-resistant strain of gonorrhea, penicillinase-producing Neisseria gonorrhoeae (PPNG).

Since indications of gonococcal pelvic inflammatory disease often occur suddenly, these patients seek attention in hospital emergency rooms. Cooperation between hospitals and county health departments attempts to get them into the mainstream of care where they not only receive treatment but adequate follow-up, and also treatment for their sex contacts. GPID was reported in approximately one of each ten women with gonorrhea in 1981 with a total of 2,349 cases as compared with 1,103 the previous year.

The statewide gonorrhea culture testing program designed to detect asymptomatic disease in females produced 471,180 cultures. Of those tested 23,079 (4.8%) were found to be positive. Treatment was confirmed for 21,264 (92.1%) of these females.

Until this year, few cases of PPNG had been reported, one reason being the difficulty involved in detecting the infection and diagnosing the condition. In the last quarter of 1980, the state laboratory initiated a method of testing for the new strain of gonorrhea which replaced the expensive, time-consuming test being used. The simplicity of this paper-strip procedure and its low cost allowed virtually all positive cultures to be tested for penicillin resistance. Prior to this time only random testing had been done.

The paper-strip test has several advantages over the previously used procedure. In addition to being simple and inexpensive, it helps control the infection because of the time factor. The test cuts several days off the time required for determining the presence of the resistant factor, thus allowing more rapid follow-up of persons found to have PPNG. When dealing with an incubation period as short as 24 to 48 hours, time is essential in control.

With implementation of this laboratory procedure, the true incidence of PPNG became more apparent. As a result, 436 cases were reported in 1981 compared with 15 cases for the previous year and three cases in the four years 1976 to 1979. Florida ranked third in the nation in number of cases behind California and New York.

Individuals in the age group 15 to 29 years accounted for 335 (76.8%) of the total cases for 1981. Seventy-three cases were reported from among those 15 to 19 years of age, 157 from those 20 to 24, and 105 from those 25 to 29. The youngest patient was a four-year-old female and the oldest a 71-year-old male. Sixty-two were white and 374 other races.

Self-motivation was given as the reason for 48.9% of the 436 patients seeking diagnosis and treatment for PPNG. Of these 192 were male and 21 female. The next most frequent reason was as a contact to a known PPNG patient. This applied to 25 males and 76 females or 23.4% of the total cases.

Dade County reported 281 cases (64.4%) of the PPNG total, Palm Beach County 51 cases (11.7%,) Broward County 27 cases (6.1%,) and Leon County 24 cases (5.5%).

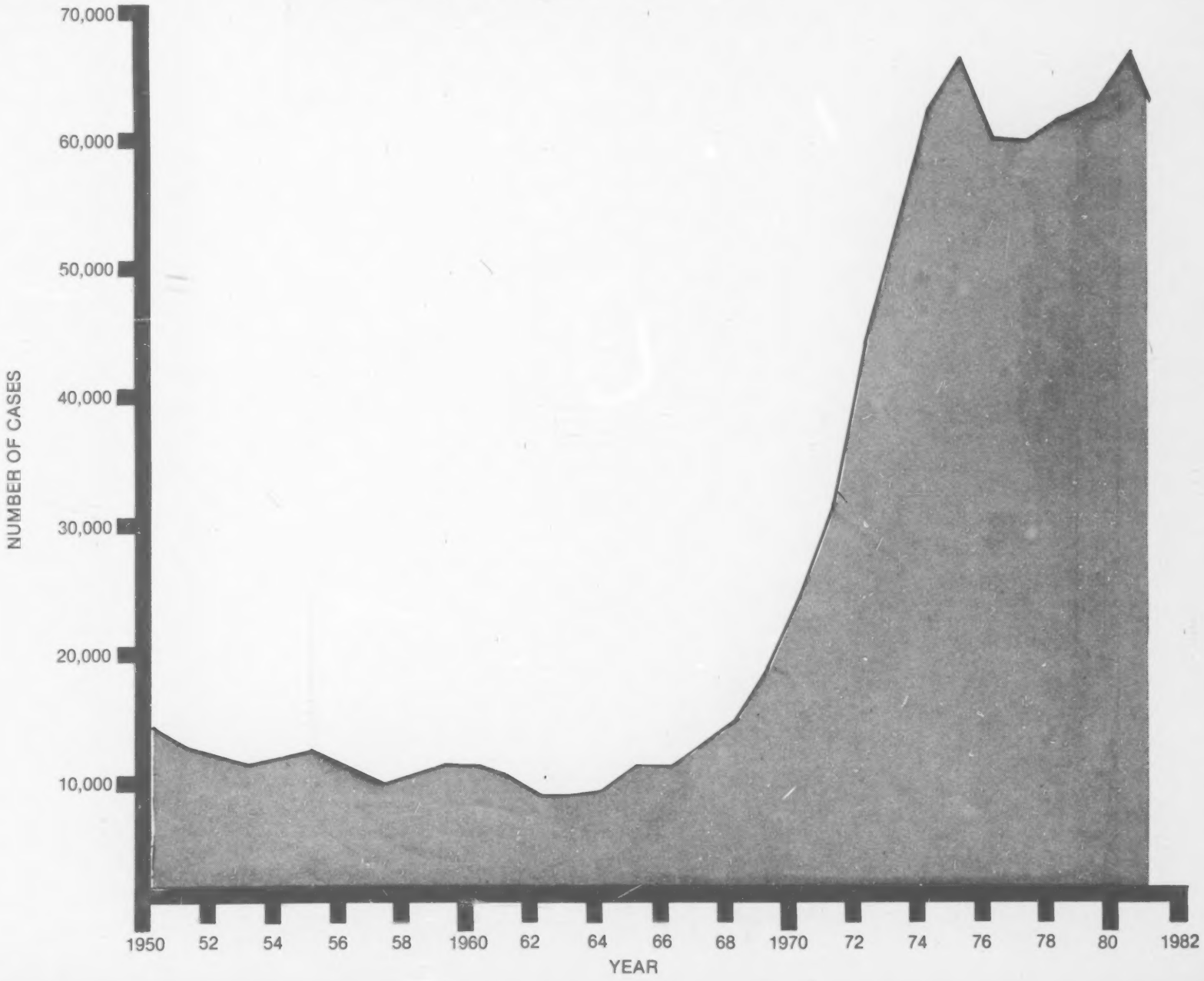
The new strain of gonorrhea reached outbreak stage in Dade County in early summer and appeared as sporadic cases in 18 other counties throughout the year. It caused a temporary shifting of venereal disease caseworkers to the southern part of the state and a change to the antibiotic, spectinomycin, for treatment of infected persons and as prophylaxis for their sex contacts. In being able to meet this new challenge, the Venereal Disease Control Program has been aided greatly by the work performed in the state laboratories.

GONORRHEA - Reported Cases By County,
Florida, 1980-81

	1981	1980	%Change		1981	1980	%Change
Alachua	1261	1377	-5.7	Lee	1218	1328	-8.3
Baker	50	50	-	Leon	1913	2259	-15.3
Bay	592	487	+21.6	Levy	29	14	+107.1
Bradford	67	54	+24.1	Liberty	6	-	*
Brevard	962	937	+2.7	Madison	73	114	-36.0
Broward	5260	6301	-16.5	Manatee	593	824	-28.0
Calhoun	23	8	+187.5	Marion	354	383	-7.6
Charlotte	56	77	-27.3	Martin	267	150	+78.0
Citrus	143	207	-30.9	Monroe	560	688	-18.6
Clay	64	82	-22.0	Nassau	66	41	+61.0
Collier	533	555	-4.0	Okaloosa	268	430	-37.7
Columbia	245	332	-26.2	Okeechobee	73	75	-2.7
Dade	11069	13979	-20.8	Orange	4413	4668	-5.5
DeSoto	393	202	+94.6	Osceola	239	240	-0.4
Dixie	64	75	-14.7	Palm Beach	3506	3630	-3.4
Duval	6077	5502	+10.5	Pasco	235	274	-14.2
Escambia	1890	2549	-25.9	Pinellas	4262	3969	+7.4
Flagler	27	38	-28.9	Polk	1723	2230	-22.7
Franklin	7	11	-36.4	Putnam	194	110	+76.4
Gadsden	366	464	-21.1	St. Johns	112	120	-6.7
Gilchrist	10	3	+233.3	St. Lucie	728	542	+34.3
Glades	13	5	+160.0	Santa Rosa	58	54	+7.4
Gulf	-	1	-100.0	Sarasota	865	752	+15.0
Hamilton	89	103	-13.6	Seminole	657	576	+14.1
Hardee	61	92	-33.7	Sumter	192	241	-20.3
Hendry	126	124	+1.6	Suwannee	52	65	-20.0
Hernando	117	115	+1.7	Taylor	62	101	-38.6
Highlands	263	190	+38.4	Union	12	-	*
Hillsborough	5590	5618	-0.5	Volusia	931	759	+22.7
Holmes	4	5	-20.0	Wakulla	15	33	-54.5
Indian River	434	331	+31.6	Walton	37	45	-17.8
Jackson	131	206	-36.4	Washington	8	38	-78.9
Jefferson	27	58	-53.4				
Lafayette	17	3	+466.7	Institutions	-	-	-
Lake	602	583	+3.3				
				State Total	60,354	65,437	-7.8

(-) Indicates no change in morbidity from prior period
(*) Indicates percent change calculation cannot be made

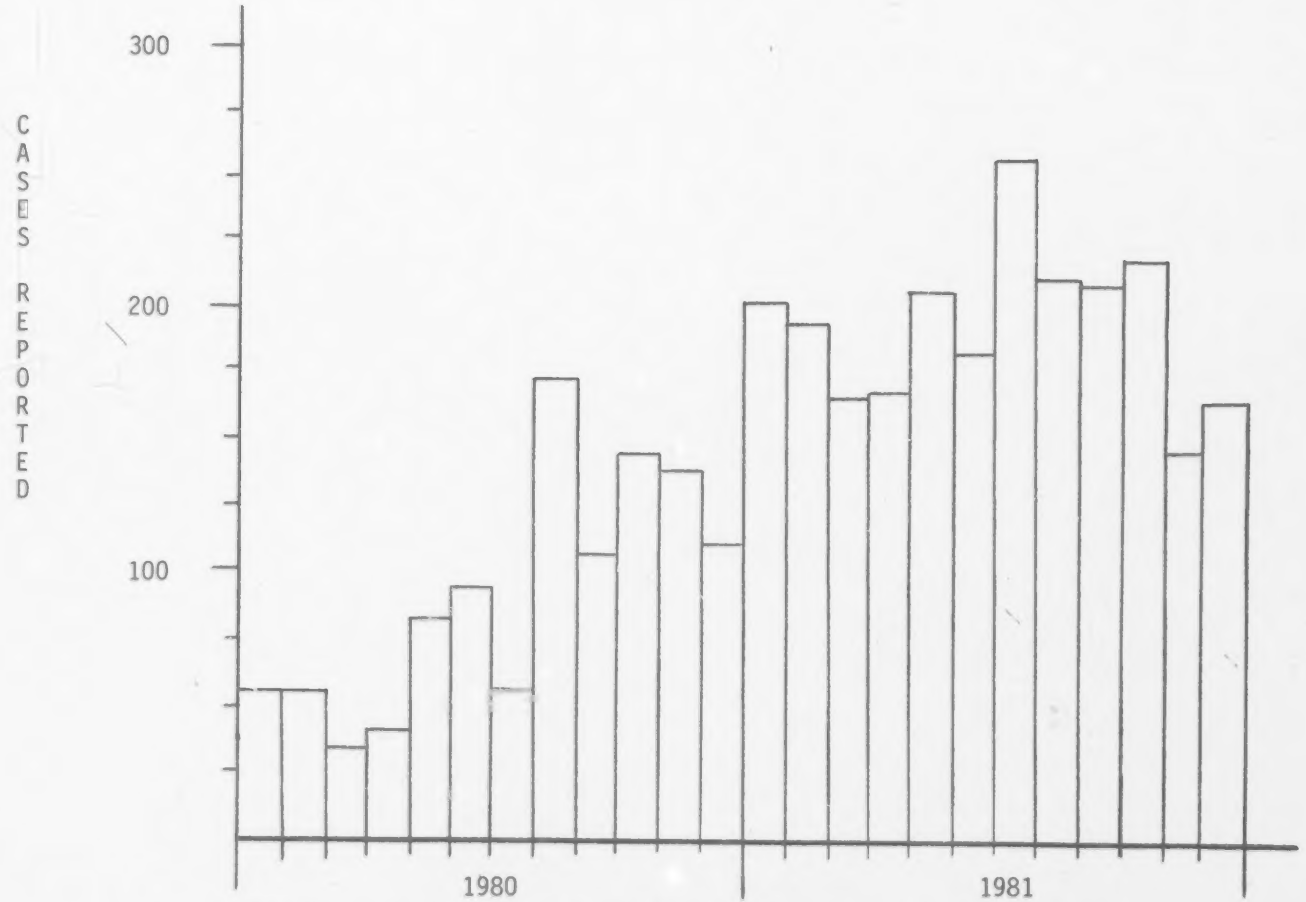
GONORRHEA - Reported cases, Florida, 1950-1981



STATE OF FLORIDA

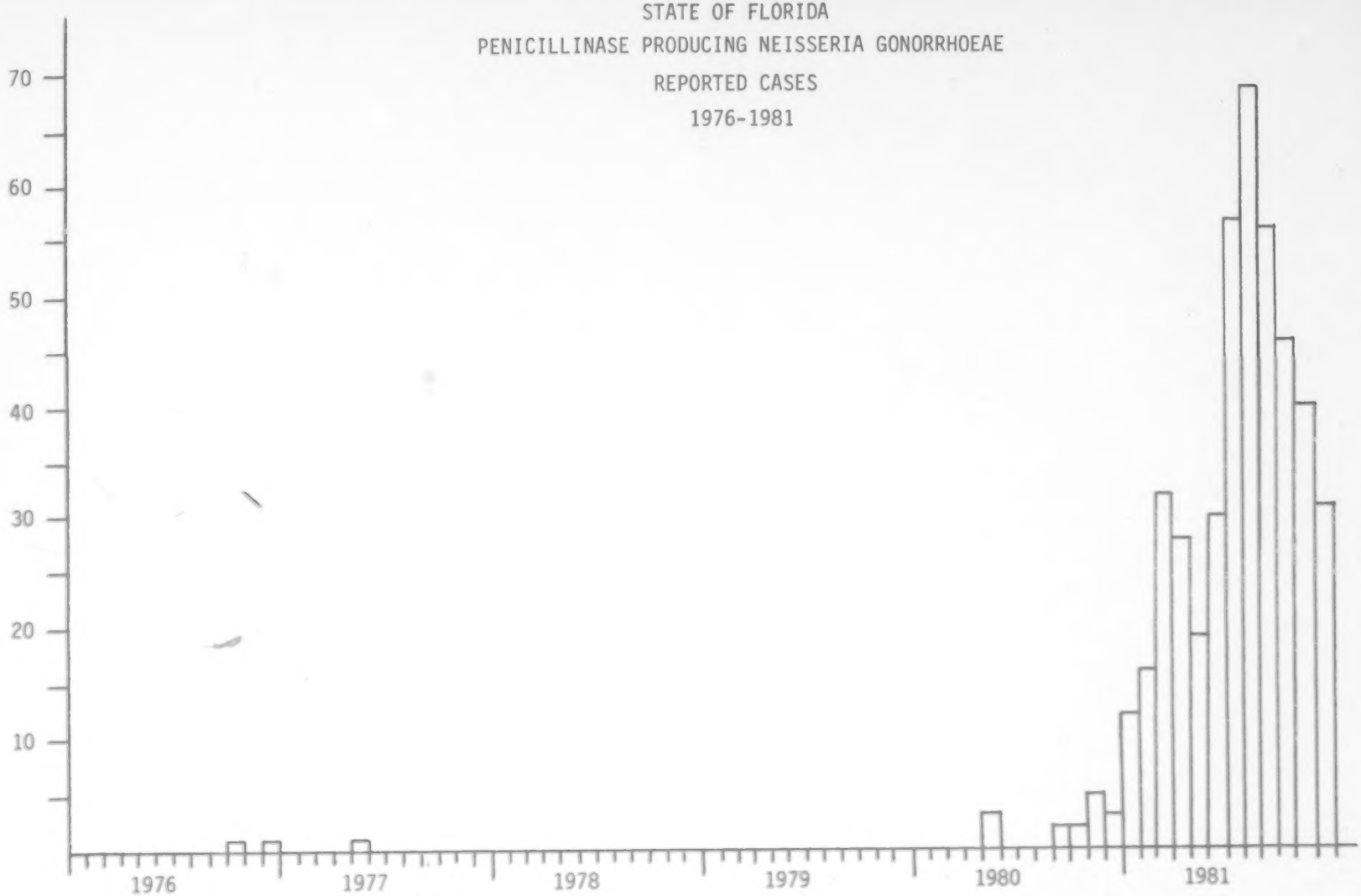
GONOCOCCAL PELVIC INFLAMMATORY DISEASE

1980-1981



1981 Morbidity equaled 10.1% of total female gonorrhea morbidity.

STATE OF FLORIDA
PENICILLINASE PRODUCING NEISSERIA GONORRHOEAE
REPORTED CASES
1976-1981



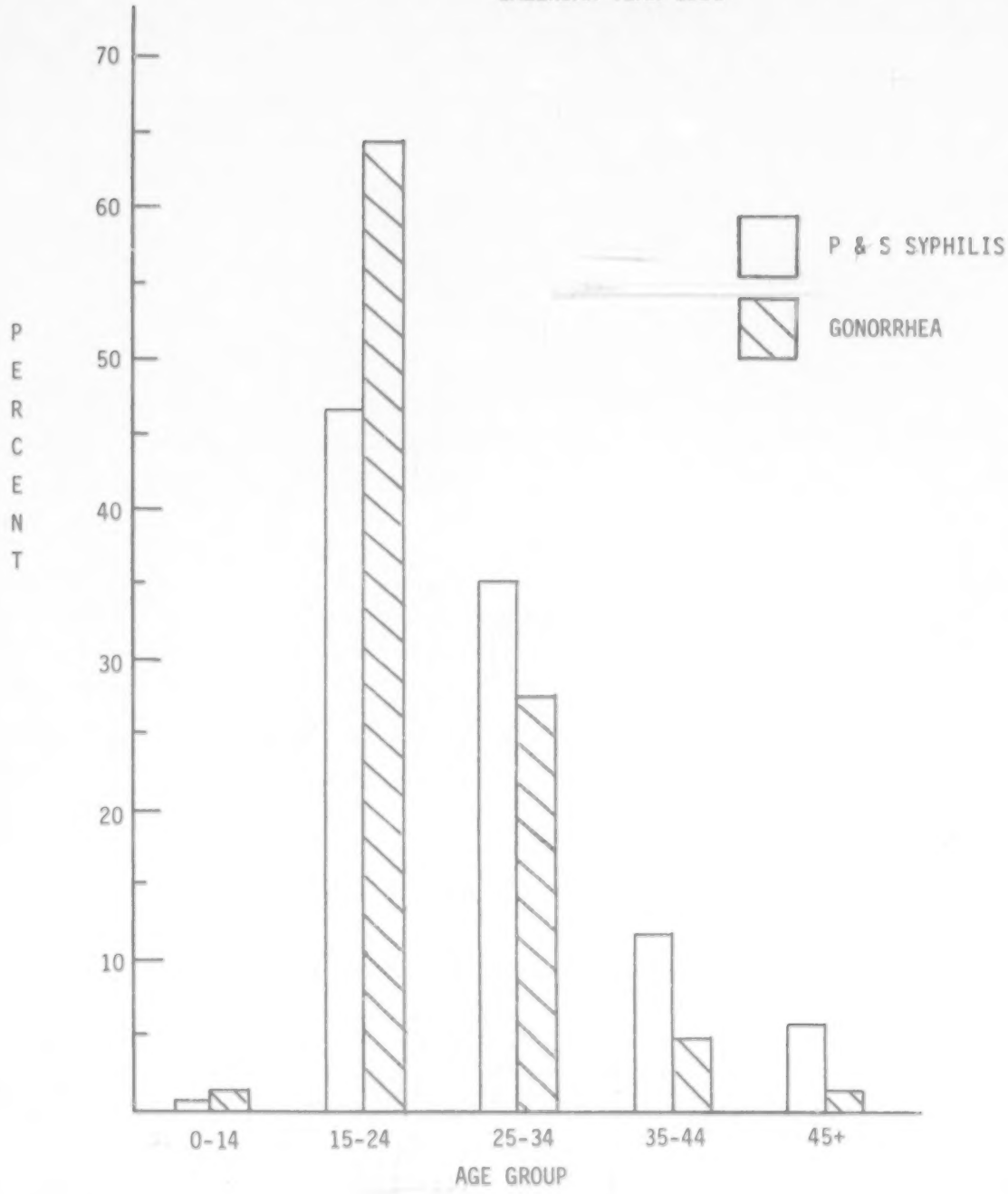
In 1981, Florida ranked 2nd in the nation in cases reported.

REPORTED SYPHILIS AND GONORRHEA CASES AND RATES
PER 100,000 POPULATION, FLORIDA 1957 - 1981

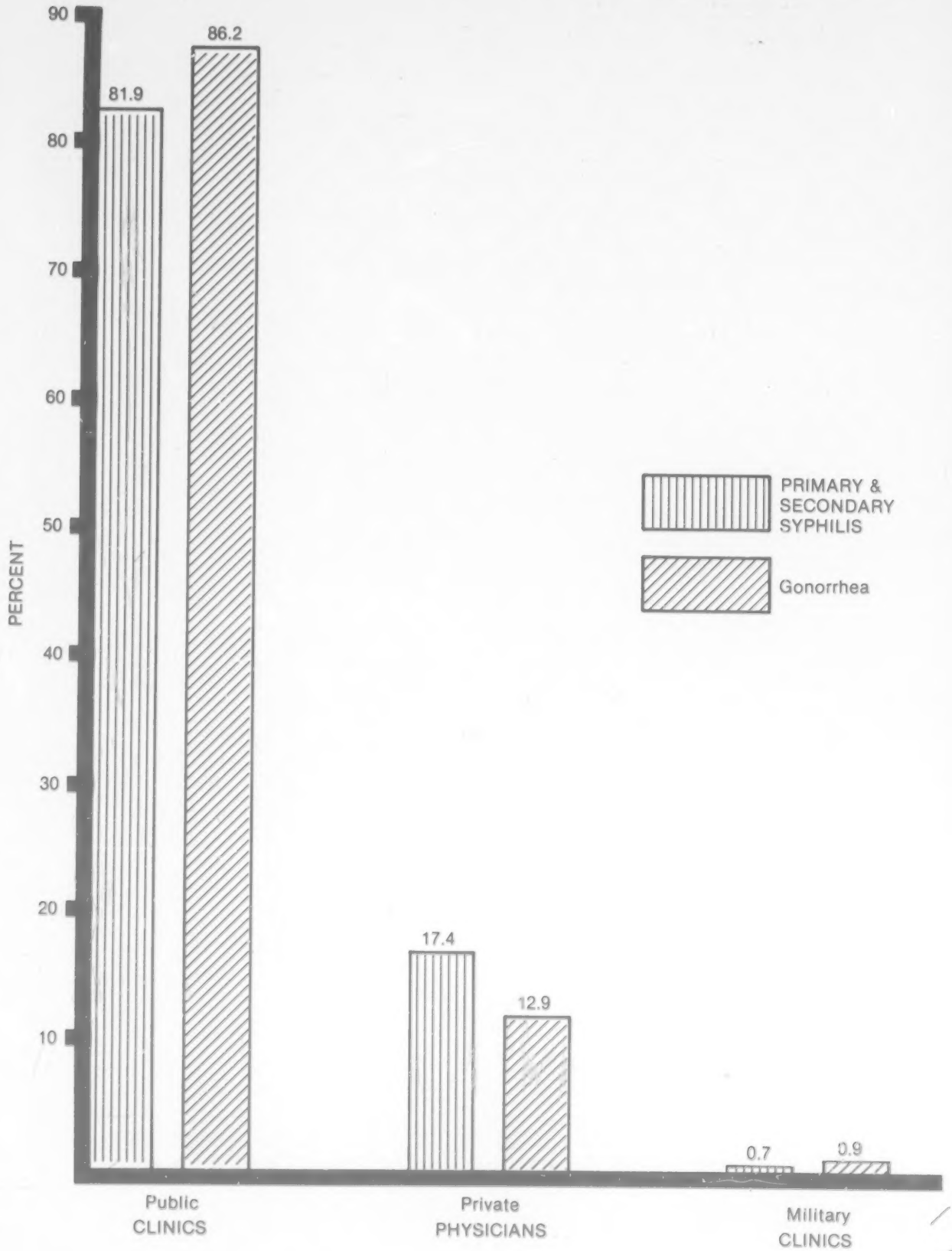
Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital		Gonorrhea	
		Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1981	10,108,564	5,971	59.1	3.036	30.0	1,376	13.6	1,552	15.4	7	0.07	60,354	597.0
1980	9,813,706	4,384	44.7	2,257	23.0	1,066	10.9	1,058	10.8	3	0.03	65,437	666.8
1979	9,294,250	4,567	49.1	2,099	22.6	1.297	14.0	1,164	12.5	7	0.08	61,427	660.9
1978	8,966,395	4,648	51.8	1,978	22.1	1,350	15.1	1,315	14.7	5	0.06	60,382	673.4
1977	8,717.334	4,543	52.1	1,828	21.0	1,957	22.4	750	8.6	8	0.1	58,843	675.0
1976	8,551,814	5,528	64.6	2.481	29.0	2,154	25.2	874	10.2	19	0.2	58,921	689.0
1975	8,485,230	6,328	74.6	3,228	38.0	1,981	23.3	1,101	13.0	18	0.2	65,031	766.4
1974	8,248,851	5,518	66.9	2,915	35.3	1,624	19.7	966	11.7	13	0.2	61,507	745.6
1973	7,845,100	4,339	55.3	1,946	24.8	1,227	15.6	1,156	14.7	10	0.1	52,582	670.3
1972	7,441,500	3,692	49.6	1.680	22.6	1,189	16.0	807	10.8	16	0.2	43,688	587.1
1971	7,024,600	3,651	52.0	1,675	23.8	1,156	16.5	781	11.1	39	0.6	30,659	436.5
1970	6,841,500	2,983	43.6	1,398	20.4	990	14.5	567	8.3	28	0.4	24,089	352.1
1969	6,651,400	3,147	47.3	1,368	20.6	868	13.0	889	13.4	22	0.3	18,257	274.5
1968	6,468,700	3,615	55.9	1,595	24.7	898	13.9	1,058	16.3	64	1.0	14,331	221.5
1967	6,287,000	4,378	69.6	1,933	30.7	861	13.7	1,456	23.2	128	2.0	12,563	199.8
1966	6,105,900	5,699	93.3	1,890	30.9	972	15.9	2,692	44.1	145	2.4	10,884	178.3
1965	5,924,700	6,132	103.5	2,356	39.8	1,037	17.5	2,527	42.6	212	3.6	10,803	182.3
1964	5,743,000	5,908	102.9	2,005	34.9	1,011	17.6	2,667	46.6	215	3.8	9,402	163.7
1963	5,560,100	6,945	124.9	1,883	33.8	999	18.0	3.742	67.3	321	5.8	8,867	159.5
1962	5,375,600	6,004	111.7	1.632	30.4	1,505	28.0	2,676	49.8	191	3.5	9,902	165.6
1961	5,188,900	5,324	102.6	1,118	21.6	1,561	30.0	2,493	48.0	152	2.9	10,215	196.9
1960	4,999,000	4,115	82.3	639	12.8	1,047	20.9	2,254	45.1	175	3.5	11,122	222.5
1959	4,790,000	4,332	90.4	344	7.2	916	19.1	2,875	60.0	197	4.1	11,172	233.2
1958	4,571,000	3,186	69.7	201	4.4	741	16.2	2,056	45.0	188	4.1	10,329	240.5
1957	4,245,000	5,514	129.9	213	5.0	1,068	25.2	3,971	93.5	262	6.2	9,725	229.1

* Beginning in 1978 the early latent syphilis category is limited to latent infections under 1 year's duration. The infections over 1 year's duration are now classified as late and late latent.

STATE OF FLORIDA
INFECTIOUS VENEREAL DISEASE MORBIDITY
PERCENTAGE OF REPORTED CASES
BY AGE GROUP
CALENDAR YEAR 1981



GONORRHEA & INFECTIOUS SYPHILIS - Reported cases by source of report, Florida, 1981



SECTION 5:

Summary of Tuberculosis

Prepared by Community Tuberculosis Control Services
Clifford H. Cole, M.D., M.P.H., Director

SUMMARY OF TUBERCULOSIS

Disease Incidence - Florida and National

In 1981, Florida reported 1,553 cases of tuberculosis and ranked fourth highest among the 50 states in number of cases reported. The tuberculosis case rate for the year was 15.3 per 100,000 population which placed Florida twelfth in the national ranking.

Although the number and the rate of tuberculosis cases reported in Florida for 1981 remain among the highest in the nation, there was a substantial reduction in both when compared with those reported for 1980. The 1,553 tuberculosis cases reported in 1981 represent a 5.7 percent reduction from the 1,647 tuberculosis cases reported in 1980 and the tuberculosis case rate of 15.3 per 100,000 population for 1981 represents a 9.5 percent reduction from the 1980 tuberculosis case rate of 16.9. It is also pleasing to note that Florida's decreases in 1981 exceeded the national decrease of 1.4 percent in number of tuberculosis cases and the national decrease of 3.3 percent in rate per 100,000 population (Table 1).

Race, Sex and Age Characteristics

The distribution of reported cases of tuberculosis in Florida by race, sex and age shows 1981 to be the first year in which the number of tuberculosis cases occurring among non-whites exceeded the number of tuberculosis cases occurring among whites. In 1981, tuberculosis cases among non-whites accounted for 54 percent of the total cases reported (Figure 1). This shift is a consequence of the large number of Haitian cases reported in 1981 (200). As in previous years, more cases have continued to occur in males than in females and in older than younger age groups (Figure 1 and Table 2).

Case rates per 100,000 population by these same variables (as presented in Figure 2 and Table 3) also show higher rates occurring in older than in younger age groups and in males than in females. Rates for non-whites are nearly eight times greater than those for whites. With the exception of the youngest and oldest age groups, case rates increase with age, regardless of race or sex. The difference in tuberculosis case rates among men and women becomes apparent after 25 years of age and progresses as the population grows older, with the earliest increases and highest rates occurring in adult non-white males.

Bacteriologic Confirmation

Of the 1,553 cases reported in 1981, bacteriologic results were available at the time of report for 1,460 or 94 percent. Thirteen hundred forty cases (86.3 %) were reported to have positive bacteriology of which 1,199 (89.5 %) represented positive culture findings. Only 93 cases (6 %) were recorded without bacteriologic results (Figure 3).

Site of Disease

Pulmonary tuberculosis accounted for 87.4 percent of reported cases in 1981, and extrapulmonary disease accounted for 12.6 percent (Table 4). Since 1975, the gradual decline in total tuberculosis morbidity is the result of decreasing numbers of cases with pulmonary disease; the incidence of extrapulmonary disease has gradually increased (Figure 4). A similar trend in extrapulmonary disease is being experienced nationwide.

Geographic Distribution

Tuberculosis data for Florida, by HRS District and by county health department, are presented in Figure 5 and Table 5. District XI reported the highest case rate for 1981 (25.3); the lowest was reported from District V (9.5). Eight counties: Baker, Bradford, Flagler, Gilchrist, Hamilton, Lafayette, Liberty and Wakulla reported no cases in 1981. Forty-eight counties recorded rates below the state average of 15.3 and 27 counties had rates of less than 10 per 100,000 population. The highest rate per 100,000 was reported by Taylor County (70.7). The number of cases reported for Taylor County increased from two cases in 1980 to 12 cases in 1981.

TABLE 1

TUBERCULOSIS - Reported cases and rates per 100,000 population, United States and Florida, 1971-1981

YEAR	United States				Florida			
	NUMBER	RATE	Percent Change		NUMBER	RATE	Percent Change	
			Number	Rate			Number	Rate
1971	35,217	17.1	--	--	1,551	22.1	--	--
1972	32,882	15.8	-6.6	-7.6	1,517	21.0	-2.2	-5.0
1973	30,998	14.8	-5.7	-6.3	1,487	19.3	-2.0	-8.1
1974	30,122	14.2	-2.8	-4.1	1,460	17.7	-1.8	-8.3
1975	33,989	15.9	--	--	1,758	21.0	--	--
1976	32,105	15.0	-5.5	-5.7	1,630	19.4	-7.3	-7.6
1977	30,145	13.9	-6.1	-7.3	1,674	19.8	+2.6	+2.0
1978	28,521	13.1	-5.4	-5.8	1,724	20.1	+2.9	+1.5
1979	27,669	12.6	-3.0	-3.8	1,628	18.4	-5.6	-8.5
1980	27,749	12.3	+0.3	-2.4	1,647	16.9	+1.2	-8.2
1981	27,373	11.9	-1.4	-3.3	1,553	15.3	-5.7	-9.5

NOTE: Case Data subsequent to 1974 are not comparable to prior years due to changes in reporting criteria which became effective in 1975.

Data prior to 1975 included only newly diagnosed cases, whereas data subsequent to 1975 include both newly diagnosed and reactivated cases.

FIGURE 1

TUBERCULOSIS - Reported cases by age, race, and sex, Florida, 1981

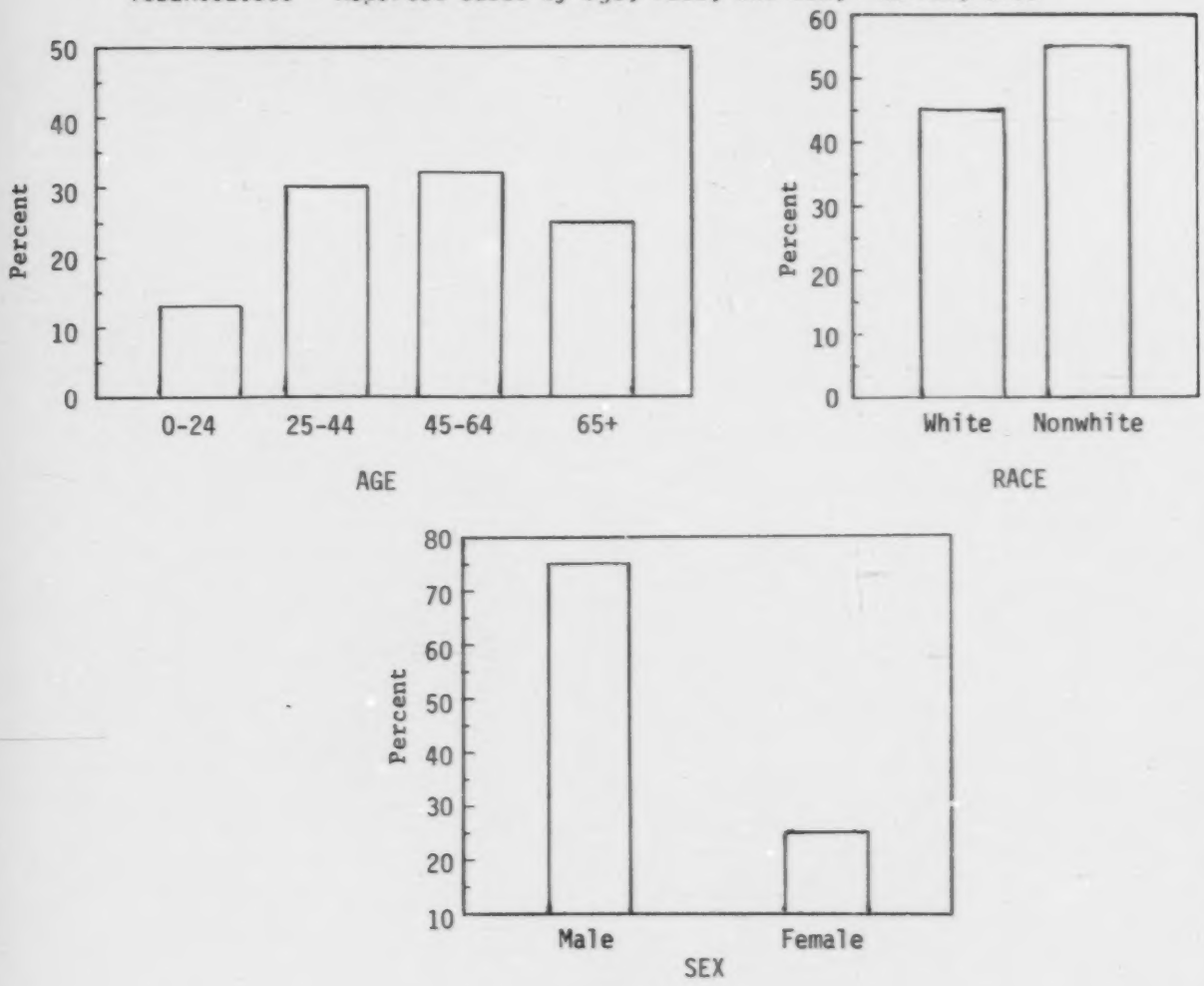


TABLE 2

TUBERCULOSIS - Reported cases by age, race, and sex, Florida, 1981

Age	Total	White			Non-White		
		Total	Male	Female	Total	Male	Female
All Ages	1553	713	517	196	840	622	218
0-4	39	9	3	6	30	17	13
5-14	17	4	1	3	13	10	3
15-24	153	28	14	14	125	79	46
25-44	465	129	91	38	336	250	86
45-64	518	283	226	57	235	190	45
65+	354	257	181	76	97	73	24
Not Stated	7	3	1	2	4	3	1

FIGURE 2

TUBERCULOSIS - Reported case rates by age, Florida, 1981

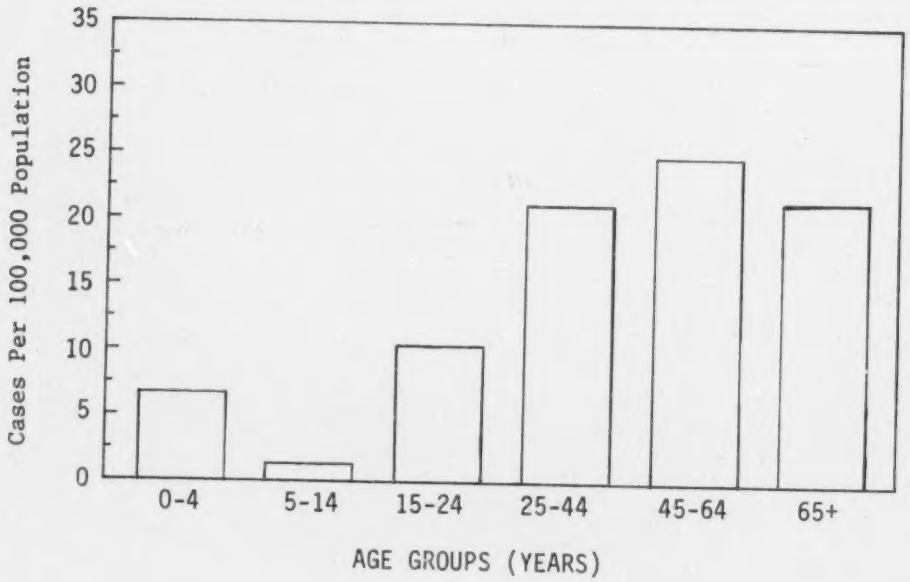


TABLE 3

TUBERCULOSIS - Reported case rates per 100,000 population by age, race and sex, Florida, 1981

	Total	White			Non-White		
		Total	Male	Female	Total	Male	Female
All Ages	15.4	8.8	13.4	4.7	68.7	108.3	33.6
0-4	6.7	2.0	1.3	2.8	20.9	23.7	18.2
5-14	1.3	0.4	0.2	0.6	5.1	8.0	2.4
15-24	10.4	2.3	2.3	2.3	49.7	64.0	35.9
25-44	21.2	6.8	9.8	3.9	116.8	194.4	54.1
45-64	24.9	15.0	26.3	5.5	122.0	224.0	41.8
65+	21.6	16.6	26.2	8.9	101.9	183.5	43.3

FIGURE 3

TUBERCULOSIS - Reported cases by bacteriological status at time of report, Florida, 1981

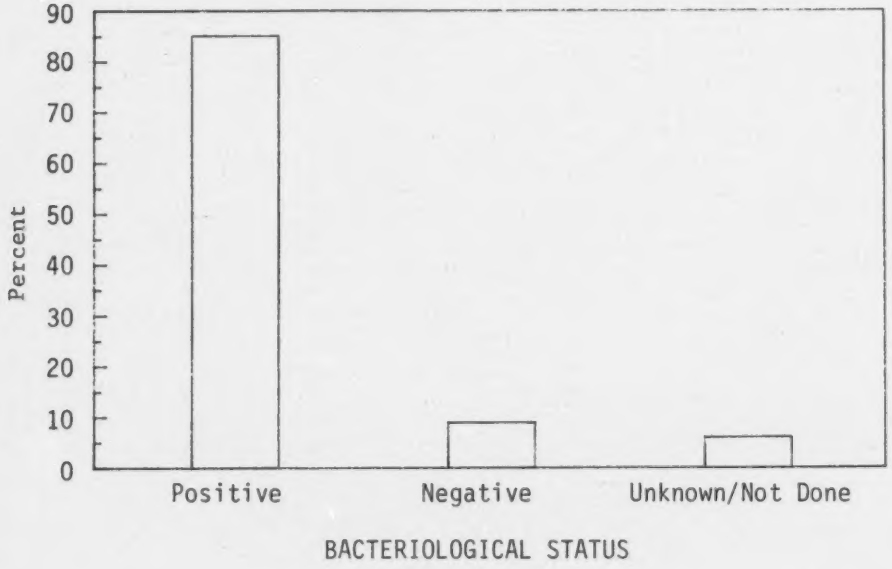


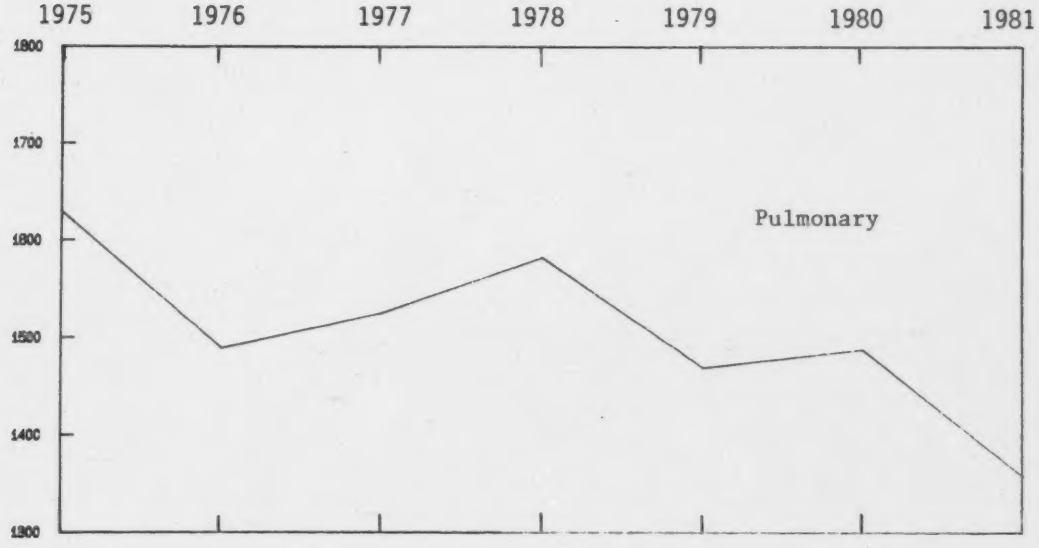
TABLE 4

TUBERCULOSIS - Reported cases and percent by site of disease, Florida, 1981

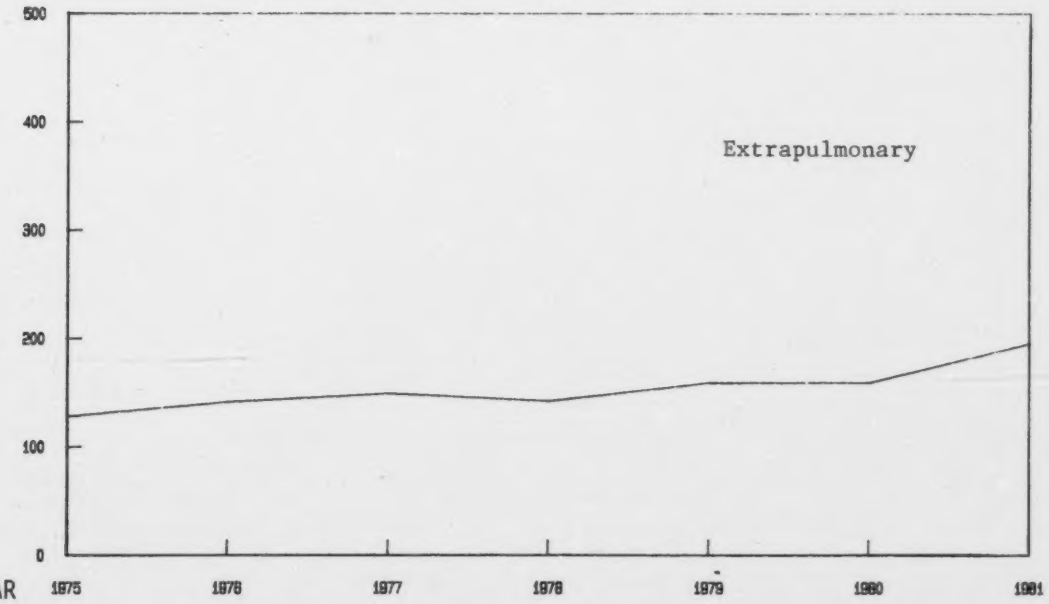
Disease Site	Reported Cases	
	Number	Percent
Pulmonary	1358	87.4
Extra-Pulmonary:		
Pleural	52	
Lymphatic	35	
Bone and/or Joint	28	
Genitourinary	23	
Miliary	28	
Meningeal	13	
Peritoneal	11	
Other	5	
Total Extra-Pulmonary	195	12.6
All Cases	1553	100.0

Figure 4

Number of Reported Pulmonary and Extra-Pulmonary Tuberculosis Cases
Florida, 1975 - 1981



	1975	1976	1977	1978	1979	1980	1981
Total	1,630	1,489	1,525	1,582	1,469	1,488	1,358



	1975	1976	1977	1978	1979	1980	1981
Total	128	141	149	142	159	159	195

Figure 5 **TUBERCULOSIS** - Reported cases and case rates per 100,000 population by HRS district, Florida, 1981

TABLE 5

TUBERCULOSIS - Reported Cases and Rates Per 100,000 Population, By Rank, By County, Florida, 1981

County	Number of Cases	Rate Per 100,000 Population	Rank	County	Number of Cases	Rate Per 100,000 Population	Rank
Florida	1,553	15.2	--	---	--	--	--
Alachua	15	9.7	36	Lafayette	0	--	50
Baker	0	--	50	Lake	27	24.8	11
Bay	8	7.9	42	Lee	24	11.1	32
Bradford	0	--	50	Leon	16	10.5	34
Brevard	25	8.8	40	Levy	2	9.6	37
Broward	121	11.5	31	Liberty	0	--	50
Calhoun	1	10.6	33	Madison	2	13.2	25
Charlotte	8	12.8	26	Manatee	22	14.1	21
Citrus	6	9.9	35	Marion	15	11.5	31
Clay	3	4.3	48	Martin	9	13.2	25
Collier	29	31.4	6	Monroe	4	6.2	46
Columbia	2	5.6	47	Nassau	1	3.0	49
Dade	453	26.0	8	Okaloosa	7	6.2	46
Desoto	3	15.4	19	Okeechobee	7	32.8	5
Dixie	1	12.1	29	Orange	60	12.4	28
Duval	96	16.6	15	Osceola	4	7.0	44
Escambia	29	12.0	30	Palm Beach	78	12.5	27
Flagler	0	--	50	Pasco	17	8.2	41
Franklin	2	25.8	9	Pinellas	74	9.9	35
Gadsden	6	14.2	20	Polk	64	19.2	13
Gilchrist	0	--	50	Putnam	8	15.6	18
Glades	1	16.2	16	St. Johns	4	7.4	43
Gulf	1	9.4	38	St. Lucie	33	34.2	4
Hamilton	0	--	50	Santa Rosa	4	7.0	44
Hardee	8	40.0	3	Sarasota	19	9.0	39
Hendry	10	50.9	2	Seminole	26	13.8	23
Hernando	6	12.0	30	Sumter	6	24.0	12
Highlands	7	13.9	22	Suwannee	6	25.5	10
Hillsborough	105	15.8	17	Taylor	12	70.7	1
Holmes	2	13.3	24	Union	1	9.6	37
Indian River	8	12.5	27	Volusia	31	11.5	31
Jackson	7	17.6	14	Wakulla	0	--	50
Jefferson	3	27.9	7	Walton	3	13.8	23
				Washington	1	6.7	45